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W05073

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ICOC 133
TOTAL # PAGES IN DOCUMENT 143

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Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Data Package Contains _____ Pages

Report Nbr: 34259

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05073	I07-009	B1L1T6	J6L020186-1	JKPK01AA	9JKPK010	6345293
		B1L204	J6L020186-2	JKPK31AA	9JKPK310	6345293
	I07-002	B1KLX1	J6L020189-1	JKPLL1AA	9JKPLL10	6345297
		B1KLX1	J6L020189-1	JKPLL1AC	9JKPLL10	6345306
		B1KLX1	J6L020189-1	JKPLL1AD	9JKPLL10	6345308
		B1KLX1	J6L020189-1	JKPLL1AE	9JKPLL10	6345301
		B1KLX1	J6L020189-1	JKPLL1AF	9JKPLL10	6345294
	S07-010	B1KPW0	J6L020191-1	JKPLR1AA	9JKPLR10	6345303
		B1KPW0	J6L020191-1	JKPLR1AC	9JKPLR10	6345304
		B1KR25	J6L020191-2	JKPLT1AA	9JKPLT10	6345297
		B1KR25	J6L020191-2	JKPLT1AC	9JKPLT10	6345299
		B1KR25	J6L020191-2	JKPLT1AD	9JKPLT10	6345293
		B1KR25	J6L020191-2	JKPLT1AE	9JKPLT10	6345303
		B1KR25	J6L020191-2	JKPLT1AF	9JKPLT10	6345304
	S07-011	B1L3R4	J6L020192-1	JKPL61AA	9JKPL610	6345306

Comments:

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Report Nbr: 34259

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05073	S07-011	B1L3R4	J6L020192-1	JKPL61AC	9JKPL610	6345308
	W07-011	B1L6F8	J6L060355-1	JKXVD1AA	9JKXVD10	6345295
		B1L6F3	J6L060355-2	JKXVG1AA	9JKXVG10	6345295
		B1L6C8	J6L060355-3	JKXVK1AA	9JKXVK10	6345295
		B1L6C3	J6L060355-4	JKXVM1AA	9JKXVM10	6345295
		B1L6D3	J6L060355-5	JKXVQ1AA	9JKXVQ10	6345295
	S07-010	B1KR39	J6L060370-1	JKXXH1AA	9JKXXH10	6345297
		B1KR39	J6L060370-1	JKXXH1AC	9JKXXH10	6345293
	W07-011	B1L674	J6L060373-1	JKX0A1AA	9JKX0A10	6345303
		B1L5V7	J6L060373-2	JKX0E1AA	9JKX0E10	6345297
		B1L5V7	J6L060373-2	JKX0E1AC	9JKX0E10	6345306
		B1L5V7	J6L060373-2	JKX0E1AD	9JKX0E10	6345308
		B1L5V7	J6L060373-2	JKX0E1AE	9JKX0E10	6345303
	S07-011	B1L3J8	J6L060376-1	JKX061AA	9JKX0610	6345297
		B1L429	J6L060376-2	JKX071AA	9JKX0710	6345297
	I07-007	B1L1P0	J6L080130-1	JK3QJ1AA	9JK3QJ10	6345301
	S07-010	B1KPP6	J6L080158-1	JK30K1AA	9JK30K10	6345297
	W07-011	B1L6H2	J6L080160-1	JK3171AA	9JK31710	7022272
	I07-010	B1L274	J6L080235-1	JK4W71AA	9JK4W710	6345293
		B1L274	J6L080235-1	JK4W71AC	9JK4W710	6345294

Comments:

Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

January 22, 2007

Attention: Dot Stewart

SAF Number	:	I07-009, I07-002, S07-010, S07-011, W07-011, I07-007, I07-010
Date SDG Closed	:	December 6, 2006
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05073
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between December 1, 2006 and December 6, 2006, twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1L204	JKPK3	12/01/06	WATER
B1L1T6	JKPK0	12/01/06	WATER
B1KLX1	JKPLL	12/01/06	WATER
B1KR25	JKPLT	12/01/06	WATER
B1KPW0	JKPLR	12/01/06	WATER
B1L3R4	JKPL6	12/01/06	WATER
B1L6D3	JKXVQ	12/05/06	WATER
B1L6C3	JKXVM	12/05/06	WATER
B1L6C8	JKXVK	12/05/06	WATER
B1L6F3	JKXVG	12/05/06	WATER
B1L6F8	JKXVD	12/05/06	WATER
B1KR39	JKXXH	12/04/06	WATER
B1L674	JKX0A	12/04/06	WATER

B1L5V7	JKX0E	12/04/06	WATER
B1L3J8	JKX06	12/05/06	WATER
B1L429	JKX07	12/05/06	WATER
B1L1P0	JK3QJ	12/05/06	WATER
B1KPP6	JK30K	12/06/06	WATER
B1L6H2	JK317	12/06/06	WATER
B1L274	JK4W7	12/06/06	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Gamma Spectroscopy
Gamma Spec by method RICH-RC-5017
Gamma Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065
Tritium by method RICH-RC-5007
Laser Induced Phosphorimetry
Total Uranium by method RICH-RC-5058
Chemical Analysis
Total Coliform by method 9223

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1L5V7) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1L3R4) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006
The LCS, batch blank, samples and sample duplicate (B1KLX1) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec by method RICH-RC-5017:
The LCS, batch blank, samples and sample duplicate (B1KR25) results are within contractual requirements.

Gamma Spec (LL) by method RICH-RC-5017:
There was insufficient sample for a duplicate analysis. A sample was recounted on a different detector to have a replicate. Except as noted, the LCS, batch blank, samples and sample duplicate (B1L1P0) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1L274) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:
The LCS, batch blank, samples, sample duplicate (B1L674), and sample matrix spike (B1L5V7) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1L3J8) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:
The LCS, batch blank, samples, sample duplicate (B1KPW0), and sample matrix spike (B1KR25) results are within contractual requirements.

Chemical Analysis

Pacific Northwest National Laboratories
January 22, 2007

Total Coliform by method 9223

The samples were analyzed in two batches: 6345295 and 7022272. The LCS, batch blank, samples and sample duplicate (B1L6D3 and B1L6H2 respectively) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sherryl A. Adam
Project Manager

1/22/2007 3:10:23 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34259 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JK30K10	B1KPP6		MW6-SBB-A1	S07-010	W05073					12/06/2006 09:48

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345297	H-3	10028-17-8	2.57E+03	pCi/L	2.0E+02	2.4E+02		2.95E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/06/2007 13:38	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JK3QJ10	B1L1P0		MW6-SBB-A1	I07-007	W05073					12/05/2006 09:48

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345301	BE-7	13966-02-4	1.57E+01	pCi/L	2.2E+01	2.2E+01	U	4.32E+01		GAMMA_GS	2.5021E+00	L	01/15/2007 18:27	I
6345301	CO-60	10198-40-0	1.54E+00	pCi/L	2.2E+00	2.2E+00	U	4.73E+00		GAMMA_GS	2.5021E+00	L	01/15/2007 18:27	I
6345301	CS-134	13967-70-9	4.12E-01	pCi/L	1.9E+00	1.9E+00	U	3.65E+00		GAMMA_GS	2.5021E+00	L	01/15/2007 18:27	I
6345301	CS-137	10045-97-3	4.64E-02	pCi/L	1.8E+00	1.8E+00	U	3.32E+00		GAMMA_GS	2.5021E+00	L	01/15/2007 18:27	I
6345301	EU-152	14683-23-9	-5.86E-01	pCi/L	4.9E+00	4.9E+00	U	8.56E+00		GAMMA_GS	2.5021E+00	L	01/15/2007 18:27	I
6345301	EU-154	15585-10-1	-4.27E+00	pCi/L	6.6E+00	6.6E+00	U	1.10E+01		GAMMA_GS	2.5021E+00	L	01/15/2007 18:27	I
6345301	EU-155	14391-16-3	2.13E-01	pCi/L	2.7E+00	2.7E+00	U	4.84E+00		GAMMA_GS	2.5021E+00	L	01/15/2007 18:27	I
6345301	K-40	13966-00-2	1.04E+00	pCi/L	4.1E+01	4.1E+01	U	9.01E+01		GAMMA_GS	2.5021E+00	L	01/15/2007 18:27	I
6345301	RU-106	13967-48-1	-7.44E+00	pCi/L	1.5E+01	1.5E+01	U	2.69E+01		GAMMA_GS	2.5021E+00	L	01/15/2007 18:27	I
6345301	SB-125	14234-35-6	2.41E+00	pCi/L	4.6E+00	4.6E+00	U	8.74E+00		GAMMA_GS	2.5021E+00	L	01/15/2007 18:27	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JK4W710	B1L274		MW6-SBB-A1	I07-010	W05073					12/06/2006 11:42

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345293	I-129L	15046-84-1	1.55E-02	pCi/L	1.2E-01	1.2E-01	U	2.20E-01	108.9	I129LL_SEP_LEPS	3.9245E+00	L	01/17/2007 19:13	I
6345294	SR-90	10098-97-2	3.87E-01	pCi/L	2.3E-01	2.5E-01	U	4.80E-01	79.5	SRISO_SEP_PRE	1.0058E+00	L	01/17/2007 06:53	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JKPK010	B1L1T6		MW6-SBB-A1	I07-009	W05073					12/01/2006 10:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345293	I-129L	15046-84-1	1.15E+00	pCi/L	3.4E-01	3.4E-01	U	5.36E-01	100.0	I129LL_SEP_LEPS	3.9343E+00	L	01/17/2007 17:26	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JKPK310	B1L204		MW6-SBB-A1	I07-009	W05073					12/01/2006 11:37

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345293	I-129L	15046-84-1	-5.68E-02	pCi/L	1.3E-01	1.3E-01	U	2.21E-01	101.1	I129LL_SEP_LEPS	3.9056E+00	L	01/17/2007 17:27	I

STL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

1

1/22/2007 3:10:23 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34259 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

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9JKPL610	B1L3R4		MW6-SBB-A1	S07-011	W05073					12/01/2006 10:22

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345306	ALPHA	12587-46-1	1.47E+00	pCi/L	1.0E+00	1.1E+00		1.33E+00	100.0	9310_ALPHABETA	1.993E-01	L	01/12/2007 16:02	I
6345308	BETA	12587-47-2	6.00E+00	pCi/L	1.6E+00	1.8E+00		2.66E+00	100.0	9310_ALPHABETA	2.011E-01	L	01/12/2007 15:18	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JKPLL10	B1KLX1		MW6-SBB-A1	I07-002	W05073					12/01/2006 11:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345297	H-3	10028-17-8	1.15E+04	pCi/L	3.6E+02	5.9E+02		2.96E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/06/2007 04:06	I
6345306	ALPHA	12587-46-1	3.77E+00	pCi/L	1.8E+00	2.0E+00		1.79E+00	100.0	9310_ALPHABETA	2.021E-01	L	01/12/2007 16:02	I
6345308	BETA	12587-47-2	1.15E+01	pCi/L	2.0E+00	2.5E+00		2.76E+00	100.0	9310_ALPHABETA	1.983E-01	L	01/12/2007 15:18	I
6345301	BE-7	13966-02-4	1.23E+01	pCi/L	2.2E+01	2.2E+01	U	4.28E+01		GAMMA_GS	2.5009E+00	L	01/15/2007 20:12	I
6345301	CO-60	10198-40-0	-1.51E+00	pCi/L	1.8E+00	1.8E+00	U	2.81E+00		GAMMA_GS	2.5009E+00	L	01/15/2007 20:12	I
6345301	CS-134	13967-70-9	5.30E-01	pCi/L	1.4E+00	1.4E+00	U	2.96E+00		GAMMA_GS	2.5009E+00	L	01/15/2007 20:12	I
6345301	CS-137	10045-97-3	7.57E-01	pCi/L	1.8E+00	1.8E+00	U	3.59E+00		GAMMA_GS	2.5009E+00	L	01/15/2007 20:12	I
6345301	EU-152	14683-23-9	-2.19E+00	pCi/L	4.7E+00	4.7E+00	U	7.94E+00		GAMMA_GS	2.5009E+00	L	01/15/2007 20:12	I
6345301	EU-154	15585-10-1	2.31E+00	pCi/L	5.1E+00	5.1E+00	U	1.09E+01		GAMMA_GS	2.5009E+00	L	01/15/2007 20:12	I
6345301	EU-155	14391-16-3	-9.45E-03	pCi/L	4.0E+00	4.0E+00	U	7.11E+00		GAMMA_GS	2.5009E+00	L	01/15/2007 20:12	I
6345301	K-40	13966-00-2	5.34E+00	pCi/L	4.2E+01	4.2E+01	U	3.29E+01		GAMMA_GS	2.5009E+00	L	01/15/2007 20:12	I
6345301	RU-106	13967-48-1	-7.15E+00	pCi/L	1.8E+01	1.8E+01	U	3.11E+01		GAMMA_GS	2.5009E+00	L	01/15/2007 20:12	I
6345301	SB-125	14234-35-6	1.69E+00	pCi/L	4.5E+00	4.5E+00	U	8.72E+00		GAMMA_GS	2.5009E+00	L	01/15/2007 20:12	I
6345294	SR-90	10098-97-2	4.22E-01	pCi/L	2.4E-01	2.5E-01	U	4.57E-01	74.9	SRISO_SEP_PRE	1.008E+00	L	01/17/2007 06:53	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JKPLR10	B1KPW0		MW6-SBB-A1	S07-010	W05073					12/01/2006 11:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345303	TC-99	14133-76-7	4.87E+00	pCi/L	3.9E+00	5.7E+00	U	8.86E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	01/10/2007 22:19	I
6345304	Uranium	7440-61-1	5.42E+00	ug/L	6.4E-01	6.4E-01		8.15E-02		UTOT_KPA	2.57E-02	ML	01/17/2007 17:28	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JKPLT10	B1KR25		MW6-SBB-A1	S07-010	W05073					12/01/2006 07:59

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

1/22/2007 3:10:23 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34259 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345297	H-3	10028-17-8	1.21E+04	pCi/L	3.7E+02	6.1E+02		2.95E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/06/2007 05:28	I
6345299	BE-7	13966-02-4	6.82E-01	pCi/L	2.2E+01	2.2E+01	U	4.19E+01		GAMMALL_GS	1.9615E+00	L	01/15/2007 18:25	I
6345299	CO-60	10198-40-0	6.91E+00	pCi/L	3.8E+00	3.8E+00	U	8.37E+00		GAMMALL_GS	1.9615E+00	L	01/15/2007 18:25	I
6345299	CS-134	13967-70-9	-4.17E-01	pCi/L	2.0E+00	2.0E+00	U	3.62E+00		GAMMALL_GS	1.9615E+00	L	01/15/2007 18:25	I
6345299	CS-137	10045-97-3	-6.48E-01	pCi/L	1.9E+00	1.9E+00	U	3.42E+00		GAMMALL_GS	1.9615E+00	L	01/15/2007 18:25	I
6345299	EU-152	14683-23-9	1.26E-01	pCi/L	5.0E+00	5.0E+00	U	8.98E+00		GAMMALL_GS	1.9615E+00	L	01/15/2007 18:25	I
6345299	EU-154	15585-10-1	1.04E+00	pCi/L	6.1E+00	6.1E+00	U	1.24E+01		GAMMALL_GS	1.9615E+00	L	01/15/2007 18:25	I
6345299	EU-155	14391-16-3	2.54E+00	pCi/L	4.2E+00	4.2E+00	U	7.65E+00		GAMMALL_GS	1.9615E+00	L	01/15/2007 18:25	I
6345299	K-40	13966-00-2	-2.63E+01	pCi/L	2.8E+01	2.8E+01	U	5.47E+01		GAMMALL_GS	1.9615E+00	L	01/15/2007 18:25	I
6345299	RU-106	13967-48-1	4.13E+00	pCi/L	1.8E+01	1.8E+01	U	3.44E+01		GAMMALL_GS	1.9615E+00	L	01/15/2007 18:25	I
6345299	SB-125	14234-35-6	-2.69E-01	pCi/L	5.8E+00	5.8E+00	U	1.02E+01		GAMMALL_GS	1.9615E+00	L	01/15/2007 18:25	I
6345293	I-129L	15046-84-1	2.56E+00	pCi/L	4.5E-01	4.5E-01		2.33E-01	101.1	I129LL_SEP_LEPS	3.8864E+00	L	01/17/2007 17:27	I
6345303	TC-99	14133-76-7	4.00E+03	pCi/L	3.4E+01	2.5E+02		9.76E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	01/10/2007 23:22	I
6345304	Uranium	7440-61-1	1.68E+01	ug/L	2.0E+00	2.0E+00		8.25E-02		UTOT_KPA	2.54E-02	ML	01/17/2007 17:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JKX0610	B1L3J8		MW6-SBB-A1	S07-011	W05073					12/05/2006 11:46

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345297	H-3	10028-17-8	5.15E+03	pCi/L	2.6E+02	3.5E+02		2.96E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/06/2007 09:33	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JKX0710	B1L429		MW6-SBB-A1	S07-011	W05073					12/05/2006 10:48

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345297	H-3	10028-17-8	5.65E+03	pCi/L	2.7E+02	3.7E+02		2.96E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/06/2007 12:16	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JKX0A10	B1L674		MW6-SBB-A1	W07-011	W05073					12/04/2006 12:47

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345303	TC-99	14133-76-7	5.91E+02	pCi/L	1.4E+01	4.1E+01		9.78E+00	100.0	TC99_ETVDSK_LS	1.254E-01	L	01/11/2007 00:25	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JKX0E10	B1L5V7		MW6-SBB-A1	W07-011	W05073					12/04/2006 10:32

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

1/22/2007 3:10:23 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34259 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345297	H-3	10028-17-8	5.41E+03	pCi/L	2.6E+02	3.6E+02		2.96E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/06/2007 08:11	I
6345306	ALPHA	12587-46-1	3.20E-01	pCi/L	1.1E+00	1.1E+00	U	2.63E+00	100.0	9310_ALPHABETA	9.00E-02	L	01/12/2007 17:37	I
6345308	BETA	12587-47-2	3.40E+01	pCi/L	3.6E+00	5.7E+00		3.83E+00	100.0	9310_ALPHABETA	1.481E-01	L	01/12/2007 15:18	I
6345303	TC-99	14133-76-7	1.06E+02	pCi/L	6.8E+00	1.2E+01		9.67E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	01/11/2007 02:30	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JKXXH10	B1KR39		MW6-SBB-A1	S07-010	W05073					12/04/2006 10:52

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6345297	H-3	10028-17-8	3.81E+04	pCi/L	6.4E+02	1.6E+03		2.95E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/06/2007 06:49	I
6345293	I-129L	15046-84-1	1.83E-01	pCi/L	1.5E-01	1.5E-01	U	3.04E-01	101.1	I129LL_SEP_LEPS	3.9458E+00	L	01/17/2007 19:11	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK7161AB	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/05/2006 11:46
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345297	H-3	4.62E+01	pCi/L	1.4E+02	U	2.96E+02	100.0		906.0_H3_LSC	5.00E-03	01/06/2007				D
BLK	10028-17-8			1.2E+02						L	01:23				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK7161DX	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/05/2006 11:46
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AS	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345297	H-3	-9.17E+01	pCi/L	1.3E+02	U	3.02E+02	100.0		906.0_H3_LSC	5.00E-03	01/06/2007				D
BLK	10028-17-8			1.2E+02						L	16:21				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK71W1AB	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/06/2006 11:42
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/06/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345293	I-129L	2.92E-02	pCi/L	1.4E-01	U	2.62E-01	100.5		I129LL_SEP_L	3.568E+00	01/17/2007				D
BLK	15046-84-1			1.4E-01						L	21:00				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK71X1AB	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 11:27
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AW	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345294	SR-90	2.09E-02	pCi/L	2.1E-01	U	4.68E-01	78.8		SRISO_SEP_P	1.002E+00	01/17/2007				D
BLK	10098-97-2			1.2E-01						L	06:53				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72C1AB	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 07:59
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345299	BE-7	-2.28E+00	pCi/L	2.8E+01	U	5.18E+01			GAMMALL_GS	2.0003E+00	01/15/2007				D
BLK	13966-02-4			2.8E+01						L	18:26				
6345299	CO-60	-1.28E+00	pCi/L	2.3E+00	U	3.84E+00			GAMMALL_GS	2.0003E+00	01/15/2007				D
BLK	10198-40-0			2.3E+00						L	18:26				
6345299	CS-134	-2.59E-03	pCi/L	2.5E+00	U	4.63E+00			GAMMALL_GS	2.0003E+00	01/15/2007				D
BLK	13967-70-9			2.5E+00						L	18:26				
6345299	CS-137	1.01E-01	pCi/L	1.7E+00	U	3.31E+00			GAMMALL_GS	2.0003E+00	01/15/2007				D
BLK	10045-97-3			1.7E+00						L	18:26				
6345299	EU-152	-5.69E+00	pCi/L	6.3E+00	U	1.01E+01			GAMMALL_GS	2.0003E+00	01/15/2007				D
BLK	14683-23-9			6.3E+00						L	18:26				
6345299	EU-154	-1.36E+00	pCi/L	6.5E+00	U	1.21E+01			GAMMALL_GS	2.0003E+00	01/15/2007				D
BLK	15585-10-1			6.5E+00						L	18:26				
6345299	EU-155	-2.47E+00	pCi/L	5.3E+00	U	8.98E+00			GAMMALL_GS	2.0003E+00	01/15/2007				D
BLK	14391-16-3			5.3E+00						L	18:26				
6345299	K-40	-2.26E+01	pCi/L	5.1E+01	U	1.16E+02			GAMMALL_GS	2.0003E+00	01/15/2007				D
BLK	13966-00-2			5.1E+01						L	18:26				
6345299	RU-106	-4.35E+00	pCi/L	2.2E+01	U	3.96E+01			GAMMALL_GS	2.0003E+00	01/15/2007				D
BLK	13967-48-1			2.2E+01						L	18:26				
6345299	SB-125	4.65E+00	pCi/L	5.2E+00	U	1.06E+01			GAMMALL_GS	2.0003E+00	01/15/2007				D
BLK	14234-35-6			5.2E+00						L	18:26				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72H1AB	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/05/2006 09:48
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345301	BE-7	1.38E+01	pCi/L	2.1E+01	U	4.24E+01			GAMMA_GS	2.501E+00	01/15/2007				D
BLK	13966-02-4			2.1E+01						L	20:13				
6345301	CO-60	-4.41E-01	pCi/L	2.1E+00	U	3.87E+00			GAMMA_GS	2.501E+00	01/15/2007				D
BLK	10198-40-0			2.1E+00						L	20:13				
6345301	CS-134	-2.24E+00	pCi/L	1.9E+00	U	2.79E+00			GAMMA_GS	2.501E+00	01/15/2007				D
BLK	13967-70-9			1.9E+00						L	20:13				
6345301	CS-137	6.64E-01	pCi/L	2.0E+00	U	3.82E+00			GAMMA_GS	2.501E+00	01/15/2007				D
BLK	10045-97-3			2.0E+00						L	20:13				
6345301	EU-152	-1.48E+00	pCi/L	3.9E+00	U	6.72E+00			GAMMA_GS	2.501E+00	01/15/2007				D
BLK	14683-23-9			3.9E+00						L	20:13				
6345301	EU-154	-1.97E+00	pCi/L	6.3E+00	U	1.14E+01			GAMMA_GS	2.501E+00	01/15/2007				D
BLK	15585-10-1			6.3E+00						L	20:13				
6345301	EU-155	-5.55E-01	pCi/L	3.0E+00	U	5.25E+00			GAMMA_GS	2.501E+00	01/15/2007				D
BLK	14391-16-3			3.0E+00						L	20:13				
6345301	K-40	-2.90E+01	pCi/L	3.8E+01	U	8.10E+01			GAMMA_GS	2.501E+00	01/15/2007				D
BLK	13966-00-2			3.8E+01						L	20:13				
6345301	RU-106	-5.70E+00	pCi/L	1.6E+01	U	2.85E+01			GAMMA_GS	2.501E+00	01/15/2007				D
BLK	13967-48-1			1.6E+01						L	20:13				
6345301	SB-125	-7.64E-02	pCi/L	4.0E+00	U	7.31E+00			GAMMA_GS	2.501E+00	01/15/2007				D
BLK	14234-35-6			4.0E+00						L	20:13				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72J1AB	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/04/2006 12:47
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/04/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345303	TC-99	4.40E+00	pCi/L	5.7E+00	U	9.38E+00	100.0		TC99_ETVDSK	1.25E-01	01/11/2007				D
BLK	14133-76-7			4.0E+00						L	04:36				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72M1AB	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 11:27
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345304	Uranium	-1.04E-02	ug/L	2.2E-03	U	8.22E-02			UTOT_KPA	2.55E-02	01/17/2007				D
BLK	7440-61-1			2.2E-03						ML	17:08				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72Q1AB	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/04/2006 10:32
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/04/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345306	ALPHA	-4.04E-02	pCi/L	2.0E-01	U	5.94E-01	100.0		9310_ALPHAB	1.998E-01	01/12/2007				D
BLK	12587-46-1			2.0E-01						L	17:37				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72R1AB	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 10:22
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345308	BETA	5.20E-01	pCi/L	1.2E+00	U	2.52E+00	100.0		9310_ALPHAB	2.046E-01	01/12/2007				
BLK	12587-47-2			1.2E+00						L	15:18				D

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK7161CS	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/05/2006 11:46
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345297	H-3	2.62E+03	pCi/L	2.5E+02		2.96E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	01/06/2007			70	D
BS	10028-17-8			2.0E+02				96.4		L	02:44			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK7161EM	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/05/2006 11:46
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345297	H-3	2.45E+03	pCi/L	2.4E+02		3.00E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	01/06/2007			70	D
BS	10028-17-8			2.0E+02				90.1		L	17:43			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK71W1CS	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/06/2006 11:42
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/06/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345293	I-129L	8.83E+00	pCi/L	1.2E+00		2.81E-01	101.0	1.03E+01	I129LL_SEP_L	3.7381E+00	01/17/2007			70	D
BS	15046-84-1			1.2E+00				85.9		L	21:01			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK71X1CS	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 11:27
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345294	SR-90	1.50E+01	pCi/L	2.4E+00		5.38E-01	68.6	1.35E+01	SRISO_SEP_P	1.0029E+00	01/17/2007			70	D
BS	10098-97-2			8.9E-01				111.1		L	06:53			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72C1CS	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 07:59
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345299	CO-60	3.03E+01	pCi/L	8.2E+00		5.12E+00		3.77E+01	GAMMALL_GS	2.0006E+00	01/15/2007			75	D
BS	10198-40-0			8.2E+00				80.5		L	18:26			125	
6345299	CS-137	2.13E+01	pCi/L	6.0E+00		4.92E+00		2.51E+01	GAMMALL_GS	2.0006E+00	01/15/2007			70	D
BS	10045-97-3			6.0E+00				84.8		L	18:26			130	
6345299	EU-152	7.71E+01	pCi/L	1.6E+01		1.29E+01		7.67E+01	GAMMALL_GS	2.0006E+00	01/15/2007			70	D
BS	14683-23-9			1.6E+01				100.5		L	18:26			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72H1CS	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/05/2006 09:48
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345301	CO-60	3.01E+01	pCi/L	6.3E+00		2.64E+00		3.03E+01	GAMMA_GS	2.5004E+00	01/15/2007			70	D
BS	10198-40-0			6.3E+00				99.4		L	21:56			130	
6345301	CS-137	1.72E+01	pCi/L	4.5E+00		3.97E+00		2.02E+01	GAMMA_GS	2.5004E+00	01/15/2007			70	D
BS	10045-97-3			4.5E+00				85.2		L	21:56			130	
6345301	EU-152	5.07E+01	pCi/L	1.2E+01		7.41E+00		6.12E+01	GAMMA_GS	2.5004E+00	01/15/2007			70	D
BS	14683-23-9			1.2E+01				82.8		L	21:56			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72J1CS	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/04/2006 12:47
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/04/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345303	TC-99	5.10E+02	pCi/L	3.6E+01		9.64E+00	100.0	5.34E+02	TC99_ETVDSK	1.256E-01	01/11/2007			75	D
BS	14133-76-7			1.3E+01				95.6		L	05:39			125	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72M1CS	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 11:27
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345304	Uranium	3.75E+01	ug/L	4.4E+00		8.15E-02		3.51E+01	UTOT_KPA	2.57E-02	01/17/2007			75	D
BS	7440-61-1			4.4E+00				106.6		ML	17:23			125	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72M1DS	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 11:27
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345304	Uranium	3.90E+00	ug/L	4.0E-01		8.25E-02		3.54E+00	UTOT_KPA	2.54E-02	01/17/2007			75	D
BS	7440-61-1			4.0E-01				110.0		ML	17:25			125	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72Q1CS	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/04/2006 10:32
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/04/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BI	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345306	ALPHA	1.96E+01	pCi/L	5.0E+00		6.36E-01	100.0	2.24E+01	9310_ALPHAB	2.018E-01	01/12/2007			70	D
BS	12587-46-1			2.0E+00				87.4		L	17:37			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK72R1CS	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 10:22
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BK	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345308	BETA	2.28E+01	pCi/L	3.7E+00		2.42E+00	100.0	2.24E+01	9310_ALPHAB	2.022E-01	01/12/2007			70	D
BS	12587-47-2			2.4E+00				101.7		L	15:18			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK3QJ1CR	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/05/2006 09:48
Client Id:	B1L1P0	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-007	MW6-SBB-A19981								AO	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345301	BE-7	-1.14E+00	pCi/L	1.8E+01	U	3.32E+01			GAMMA_GS	2.5021E+00	01/15/2007	231.4	1.3		D
DUP	13966-02-4	1.57E+01		1.8E+01						L	20:13	20.0	3		
6345301	CO-60	-2.77E-01	pCi/L	1.5E+00	U	2.88E+00			GAMMA_GS	2.5021E+00	01/15/2007	288.0	1.7		D
DUP	10198-40-0	1.54E+00		1.5E+00						L	20:13	20.0	3		
6345301	CS-134	-2.42E-01	pCi/L	1.6E+00	U	2.89E+00			GAMMA_GS	2.5021E+00	01/15/2007	771.2	0.6		D
DUP	13967-70-9	4.12E-01		1.6E+00						L	20:13	20.0	3		
6345301	CS-137	-1.39E-01	pCi/L	1.7E+00	U	3.06E+00			GAMMA_GS	2.5021E+00	01/15/2007	0.0	0.2		D
DUP	10045-97-3	4.64E-02		1.7E+00						L	20:13	20.0	3		
6345301	EU-152	3.48E+00	pCi/L	4.3E+00	U	8.22E+00			GAMMA_GS	2.5021E+00	01/15/2007	281.0	1.4		D
DUP	14683-23-9	-5.86E-01		4.3E+00						L	20:13	20.0	3		
6345301	EU-154	2.69E-01	pCi/L	4.9E+00	U	9.73E+00			GAMMA_GS	2.5021E+00	01/15/2007	0.0	1.3		D
DUP	15585-10-1	-4.27E+00		4.9E+00						L	20:13	20.0	3		
6345301	EU-155	-2.78E-01	pCi/L	3.0E+00	U	5.31E+00			GAMMA_GS	2.5021E+00	01/15/2007	0.0	0.2		D
DUP	14391-16-3	2.13E-01		3.0E+00						L	20:13	20.0	3		
6345301	K-40	2.08E+01	pCi/L	2.5E+01	U	5.81E+01			GAMMA_GS	2.5021E+00	01/15/2007	180.9	1.1		D
DUP	13966-00-2	1.04E+00		2.5E+01						L	20:13	20.0	3		
6345301	RU-106	-7.20E+00	pCi/L	1.5E+01	U	2.63E+01			GAMMA_GS	2.5021E+00	01/15/2007	0.0	0.		D
DUP	13967-48-1	-7.44E+00		1.5E+01						L	20:13	20.0	3		
6345301	SB-125	3.52E+00	pCi/L	3.9E+00	U	7.76E+00			GAMMA_GS	2.5021E+00	01/15/2007	37.6	0.4		D
DUP	14234-35-6	2.41E+00		3.9E+00						L	20:13	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JK4W71DR	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/06/2006 11:42
Client Id:	B1L274	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/06/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-010	MW6-SBB-A19981								AP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345293	I-129L	-3.40E-02	pCi/L	1.2E-01	U	2.18E-01	99.2		I129LL_SEP_L	3.7415E+00	01/17/2007	0.0	0.6		D
DUP	15046-84-1	1.55E-02		1.2E-01						L	19:13	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JKPL61DR	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 10:22
Client Id:	B1L3R4	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-011	MW6-SBB-A19981								BL	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345308	BETA	6.76E+00	pCi/L	1.9E+00		2.60E+00	100.0		9310_ALPHAB	2.028E-01	01/12/2007	11.8	0.6		D
DUP	12587-47-2	6.00E+00		1.7E+00						L	15:18	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JKPLL1GR	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 11:27
Client Id:	B1KLX1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-002	MW6-SBB-A19981								BM	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345294	SR-90	2.26E-01	pCi/L	2.2E-01	U	4.33E-01	82.6		SRISO_SEP_P	1.0006E+00	01/17/2007	60.4	1.3		D
DUP	10098-97-2	4.22E-01		2.2E-01						L	06:53	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JKPLR1DR	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 11:27
Client Id:	B1KPW0	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-010	MW6-SBB-A19981								BN	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345304	Uranium	5.41E+00	ug/L	6.4E-01		8.03E-02			UTOT_KPA	2.61E-02	01/17/2007	.3	0.		D
DUP	7440-61-1	5.42E+00		6.4E-01						ML	17:31	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JKPLT1GR	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 07:59
Client Id:	B1KR25	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-010	MW6-SBB-A19981								BO	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345299	BE-7	-1.03E+01	pCi/L	3.0E+01	U	5.15E+01			GAMMALL_GS	1.9441E+00	01/15/2007	0.0	0.5		D
DUP	13966-02-4	6.82E-01		3.0E+01						L	20:11	20.0	3		
6345299	CO-60	1.08E+01	pCi/L	4.5E+00		4.62E+00			GAMMALL_GS	1.9441E+00	01/15/2007	44.2	1.2		D
DUP	10198-40-0	6.91E+00		4.5E+00						L	20:11	20.0	3		
6345299	CS-134	6.55E-01	pCi/L	2.2E+00	U	4.52E+00			GAMMALL_GS	1.9441E+00	01/15/2007	903.5	0.7		D
DUP	13967-70-9	-4.17E-01		2.2E+00						L	20:11	20.0	3		
6345299	CS-137	5.70E-01	pCi/L	2.0E+00	U	3.91E+00			GAMMALL_GS	1.9441E+00	01/15/2007	0.0	0.9		D
DUP	10045-97-3	-6.48E-01		2.0E+00						L	20:11	20.0	3		
6345299	EU-152	-2.55E+00	pCi/L	5.5E+00	U	9.24E+00			GAMMALL_GS	1.9441E+00	01/15/2007	0.0	0.7		D
DUP	14683-23-9	1.26E-01		5.5E+00						L	20:11	20.0	3		
6345299	EU-154	-1.95E+00	pCi/L	6.8E+00	U	1.28E+01			GAMMALL_GS	1.9441E+00	01/15/2007	0.0	0.6		D
DUP	15585-10-1	1.04E+00		6.8E+00						L	20:11	20.0	3		
6345299	EU-155	-4.81E+00	pCi/L	4.6E+00	U	7.04E+00			GAMMALL_GS	1.9441E+00	01/15/2007	0.0	2.3		D
DUP	14391-16-3	2.54E+00		4.6E+00						L	20:11	20.0	3		
6345299	K-40	2.25E+00	pCi/L	4.3E+01	U	4.68E+01			GAMMALL_GS	1.9441E+00	01/15/2007	0.0	0.9		D
DUP	13966-00-2	-2.63E+01		4.3E+01						L	20:11	20.0	3		
6345299	RU-106	-1.75E+01	pCi/L	2.0E+01	U	3.12E+01			GAMMALL_GS	1.9441E+00	01/15/2007	0.0	1.6		D
DUP	13967-48-1	4.13E+00		2.0E+01						L	20:11	20.0	3		
6345299	SB-125	1.07E+00	pCi/L	5.2E+00	U	9.85E+00			GAMMALL_GS	1.9441E+00	01/15/2007	334.9	0.4		D
DUP	14234-35-6	-2.69E-01		5.2E+00						L	20:11	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JKX061CR	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/05/2006 11:46
Client Id:	B1L3J8	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-011	MW6-SBB-A19981								BQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345297	H-3	4.60E+03	pCi/L	3.2E+02		2.95E+02	100.0		906.0_H3_LSC	5.00E-03	01/06/2007	11.2	2.4		D
DUP	10028-17-8	5.15E+03		2.5E+02						L	10:54	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JKX0A1CR	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/04/2006 12:47
Client Id:	B1L674	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/04/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-011	MW6-SBB-A19981								BR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345303	TC-99	5.91E+02	pCi/L	4.1E+01		9.56E+00	100.0		TC99_ETVDSK	1.259E-01	01/11/2007	.1	0.		D
DUP	14133-76-7	5.91E+02		1.4E+01						L	01:28	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JKX0E1GR	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/04/2006 10:32
Client Id:	B1L5V7	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/04/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-011	MW6-SBB-A19981								BT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345306	ALPHA	1.60E+00	pCi/L	1.7E+00	U	2.88E+00	100.0		9310_ALPHAB	9.32E-02	01/12/2007	133.5	1.1		D
DUP	12587-46-1	3.20E-01		1.6E+00						L	17:37	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JKPLT1HW	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/01/2006 07:59
Client Id:	B1KR25	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	MS		**Received Date:** 12/01/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-010	MW6-SBB-A19981								BP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345304	Uranium	3.86E+01	ug/L	6.8E+00		8.09E-02		3.47E+01	UTOT_KPA	2.59E-02	01/17/2007			60	D
MS	7440-61-1			6.8E+00				111.3		ML	17:34			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, January 22, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05073.Edd, h:\Reportdb\edd\FeadIV\Rad\34259.Edd

Lab Sample Id:	JKX0E1FW	**Sdg/Rept Nbr:**	W05073	34259	**Collection Date:** 12/04/2006 10:32
Client Id:	B1L5V7	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	MS		**Received Date:** 12/04/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-011	MW6-SBB-A19981								BS	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6345303	TC-99	3.11E+03	pCi/L	2.0E+02		9.32E+00	100.0	3.57E+03	TC99_ETVDSK	1.258E-01	01/11/2007			60	D
MS	14133-76-7			3.0E+01				87.3		L	03:33			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**STL Richland's SOP number**
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/vn), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) *u_c - Combined Uncertainty.*	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, *u_c the combined uncertainty*. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

FormNI	FormS	Recd	FormatTy	Versio	SampleNbr	Contract	LabCode	LabC	Caset	SAS	SDGNbr
W	AA	H	FEAD	05	B1L6H2	MW6-SBB-A19981	STLRL				W05073
W	AB	H	FEAD	05	B1L6F8	MW6-SBB-A19981	STLRL				W05073
W	AC	H	FEAD	05	B1L6F3	MW6-SBB-A19981	STLRL				W05073
W	AD	H	FEAD	05	B1L6C8	MW6-SBB-A19981	STLRL				W05073
W	AE	H	FEAD	05	B1L6C3	MW6-SBB-A19981	STLRL				W05073
W	AF	H	FEAD	05	B1L6D3	MW6-SBB-A19981	STLRL				W05073
W	AG	H	FEAD	05	B1L6H2	MW6-SBB-A19981	STLRL				W05073
W	AH	H	FEAD	05	NA	MW6-SBB-A19981	STLRL				W05073
W	AI	H	FEAD	05	NA	MW6-SBB-A19981	STLRL				W05073
W	AJ	H	FEAD	05	B1L6D3	MW6-SBB-A19981	STLRL				W05073
W	AK	H	FEAD	05	NA	MW6-SBB-A19981	STLRL				W05073
W	AL	H	FEAD	05	NA	MW6-SBB-A19981	STLRL				W05073

AnalyticalMatrix	LabReceivedDate	CollectedDate	PercentSo	Decante	LabSampleId	LabFileId	SafNbr
WATER	12/06/2006	12/06/2006			9JK31710		
WATER	12/05/2006	12/05/2006			9JKXVD10		
WATER	12/05/2006	12/05/2006			9JKXVG10		
WATER	12/05/2006	12/05/2006			9JKXVK10		
WATER	12/05/2006	12/05/2006			9JKXVM10		
WATER	12/05/2006	12/05/2006			9JKXVQ10		
WATER	12/06/2006	12/06/2006			JK3171DR		
WATER	12/05/2006	12/05/2006			JK7101AB		
WATER	12/05/2006	12/05/2006			JK7101AC		
WATER	12/05/2006	12/05/2006			JKXVQ1DR		
WATER	12/06/2006	12/06/2006			JM6RE1AB		
WATER	12/06/2006	12/06/2006			JM6RE1AC		

CollectedTime	PercentM	Filename	SpecificMat
13:14		h:\Reportdb\edd\FeadlV\Wet\W0507	
13:59		h:\Reportdb\edd\FeadlV\Wet\W0507	
13:16		h:\Reportdb\edd\FeadlV\Wet\W0507	
11:54		h:\Reportdb\edd\FeadlV\Wet\W0507	
10:25		h:\Reportdb\edd\FeadlV\Wet\W0507	
11:12		h:\Reportdb\edd\FeadlV\Wet\W0507	
13:14		h:\Reportdb\edd\FeadlV\Wet\W0507	
15:40		h:\Reportdb\edd\FeadlV\Wet\W0507	
15:40		h:\Reportdb\edd\FeadlV\Wet\W0507	
11:12		h:\Reportdb\edd\FeadlV\Wet\W0507	
15:33		h:\Reportdb\edd\FeadlV\Wet\W0507	
15:33		h:\Reportdb\edd\FeadlV\Wet\W0507	

FormNbr	FormSuffix	RecordType	CASNbr	Isotope	Result
W	AA	D	COLIFORM	COLIFORM	+1.00E+00
W	AB	D	COLIFORM	COLIFORM	+1.00E+00
W	AC	D	COLIFORM	COLIFORM	+1.00E+00
W	AD	D	COLIFORM	COLIFORM	+3.45E+02
W	AE	D	COLIFORM	COLIFORM	+1.00E+00
W	AF	D	COLIFORM	COLIFORM	+1.00E+00
W	AG	D	COLIFORM	COLIFORM	+1.00E+00
W	AH	D	COLIFORM	COLIFORM	+1.00E+00
W	AI	D	COLIFORM	COLIFORM	+9.70E+00
W	AJ	D	COLIFORM	COLIFORM	+1.00E+00
W	AK	D	COLIFORM	COLIFORM	+1.00E+00
W	AL	D	COLIFORM	COLIFORM	+2.63E+02

OrigResult	ConcentrationUr	ActionCode	AnalysisMethod	SampleAliquotS	SampleAliquotU
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI
	Col/100ml	I	9223 COLIFO	+1.00E+02	MI

LabQualifier	DilutionFactor	DateAnalyzed	TimeAnalyzed	BatchNbr	QcType
U	1	12/06/2006	00:00	7022272	
U	1	12/05/2006	00:00	6345295	
U	1	12/05/2006	00:00	6345295	
	1	12/05/2006	00:00	6345295	
U	1	12/05/2006	00:00	6345295	
U	1	12/05/2006	00:00	6345295	
U	1	12/06/2006	00:00	7022272	DUP
U	1	12/05/2006	00:00	6345295	BLK
	1	12/05/2006	00:00	6345295	BS
U	1	12/05/2006	00:00	6345295	DUP
U	1	12/06/2006	00:00	7022272	BLK
	1	12/06/2006	00:00	7022272	BS

SpikeConc	PercentRecover	Rpd	RpdMaximum	Rpd_UCL	LCSMS_LCL
		0			
		0			

LCS_UCL	TracerYield	DetectionLimit	RL	RLType	CommentCode
		1.00E+00	1.00E+00	RDL	
		1.00E+00	1.00E+00	RDL	
		1.00E+00	1.00E+00	RDL	
		1.00E+00	1.00E+00	RDL	
		1.00E+00	1.00E+00	RDL	
		1.00E+00	1.00E+00	RDL	
		1.00E+00	1.00E+00	RDL	
		1.00E+00	1.00E+00	RDL	
		1.00E+00	1.00E+00	RDL	
		1.00E+00	1.00E+00	RDL	
		1.00E+00	1.00E+00	RDL	

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/16/2007 8:32:55 AM

Lot No., Due Date: J6L020192,J6L020189,J6L060373; 01/22/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6345306; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05073; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JKX0E1AC 90.00<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JKX0E1AG ALPHA 130.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JKPLL1AC ALPHA 3.8E+00 L:1.8E+00 JKPL61AA ALPHA 1.5E+00 L:1.3E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Lisa Gustason Pam Andrews **Date** 11/16/07

1-16-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6345306
W05073

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other 1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response: _____

Second Level Review: Sheryl K Adam Date: 1-16-07

LS-038B, Rev. 10, 8/02

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/16/2007 8:29:56 AM

Lot No., Due Date: J6L020192,J6L020189,J6L060373; 01/22/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6345308; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05073; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JKX0E1AD 148.10<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JKPLL1AD BETA 1.1E+01 L:2.8E+00 JKPL61AC BETA 6.0E+00 L:2.7E+00 JKX0E1AD BETA 3.4E+01 L:3.8E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		

8.25 Counting Spectrum are within FWHM Limits. Yes No N/A ✓
No FWHM found in Batch Data!

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓
No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate. Yes No N/A ✓
OK

First Level Review Lisa Mattson Pam Anderson 1-16-07 **Date** 1/16/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 345308
WD5073

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 1-16-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/17/2007 4:30:23 PM

Lot No., Due Date:	J6L080235,J6L020189; 01/22/2007
Client, Site:	384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test:	6345294; RSR85907 Sr-85/90 by GPC-7
SDG, Matrix:	W05073; WATER

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes ✓	No	N/A
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes ✓	No	N/A
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Review Paul Anderson Date 1-17-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6345294
W05073

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4, Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 1-18-07

SEVERN STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/16/2007 5:11:05 PM

Lot No., Due Date:	J6L020191; 01/22/2007
Client, Site:	384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test:	6345299; RGAMMA Gamma by GER
SDG, Matrix:	W05073; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes	No	N/A ✓
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A

5.0 Other

5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes ✓	No	N/A
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Review Pam Andersen Date 1-17-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 345299
W05073

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4, Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Shirley A Adams Date: 1-17-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/16/2007 5:11:34 PM

Lot No., Due Date:	J6L080130,J6L020189; 01/22/2007
Client, Site:	384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test:	6345301; RGAMMA Gamma by GER
SDG, Matrix:	W05073; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes ✓ No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes ✓ No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes ✓ No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes ✓ No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A ✓

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes ✓ No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes ✓ No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A ✓

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes ✓ No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes ✓ No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes ✓ No N/A

4.2 Were analysis volumes entered correctly? Yes ✓ No N/A

4.3 Were Yields entered correctly? Yes No N/A ✓

4.4 Were spectra reviewed/meet contractual requirements? Yes ✓ No N/A

4.5 Were raw counts reviewed for anomalies? Yes ✓ No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A ✓

5.2 Are all required forms filled out? Yes ✓ No N/A

5.3 Was the correct methodology used? Yes ✓ No N/A

5.4 Was transcription checked? Yes ✓ No N/A

5.5 Were all calculations checked at a minimum frequency? Yes ✓ No N/A

5.6 Are worksheet entries complete and correct? Yes ✓ No N/A

6.0 Comments on any No response:

NCM # ~~7.09~~ PA 1-17-07
10-09288

First Level Review Pam Anderson Date 1-17-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6245301
W05073

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?			
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other 1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response: See NCM

Second Level Review: Sheryl A Adam Date: 1-17-07

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: 10-09288
NCM Initiated By: Pam Anderson
Date Opened: 01/17/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Gamma by GER
Lot #'s (Sample #'s): J6L080130 (1),
QC Batches: 6345301

Nonconformance: Other (describe in detail)
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	01/17/2007	There was insufficient sample for a duplicate in this gamma in water batch. A sample was recounted on a different detector to have a replicate.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	01/17/2007	NA

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/19/2007 11:53:34 AM

Lot No., Due Date:	J6L080235,J6L020186,J6L020191,J6L060370; 01/22/2007
Client, Site:	384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test:	6345293; RGAMLEPS Gamma by LEPS
SDG, Matrix:	W05073; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?	✓		
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?	✓		
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Pam Anderson Date 1-19-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6345293
W05073

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4, Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 1-19-07

Lot No., Due Date: J6L020191,J6L060373; 01/22/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 6345303; RTC99 Tc-99 by LSC
SDG, Matrix: W05073; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JKX0E1AF TCSG<>TCSE Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓
No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate. Yes ✓ No N/A
OK

First Level Review Pam Anderson Date 1-12-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6345303
W052073

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Cheryl A Adams Date: 1-15-07

LS-038B, Rev. 10, 8/02

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/9/2007 4:51:20 PM

Lot No., Due Date: J6L080158,J6L020189,J6L020191,J6L060376,J6L060373,J6L060370; 01/22/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6345297; RTRITIUM H-3 by LSC

SDG, Matrix: W05073; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JKPLL1AA 5.00<10.00 JKPLT1AA 5.00<10.00 JKXXH1AA 5.00<10.00 JKX0E1AA 5.00<10.00 JKX061AA 5.00<10.00 JKX071AA 5.00<10.00 JK30K1AA 5.00<10.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => JK7161AF SVP15/5<>SVP10/10 JK7161AG SVP15/5<>SVP10/10 JK7161AA SVP15/5<>SVP10/10 JK7161AC SVP15/5<>SVP10/10 JKPLL1AA SVP15/5<>SVP10/10 JKPLT1AA SVP15/5<>SVP10/10 JKXXH1AA SVP15/5<>SVP10/10 JKX0E1AA SVP15/5<>SVP10/10 JKX061AA SVP15/5<>SVP10/10 JKX061AC SVP15/5<>SVP10/10 JKX071AA SVP15/5<>SVP10/10 JK30K1AA SVP15/5<>SVP10/10 JK7161AH SVP15/5<>SVP10/10 JK7161AD SVP15/5<>SVP10/10 JK7161AE SVP15/5<>SVP10/10 Q:VC		✓	
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	✓		
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. OK	✓		
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓

8.19 Sample Specific MDC <= CRDL. OK	Yes ✓	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A ✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes ✓	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => H-3 OK; No Callin Level Found => H-3	Yes ✓	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Dana Anderson Date 1-10-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: W345297
W05073

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 1-10-07

LS-038B, Rev. 10, 8/02

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/18/2007 11:03:38 AM

Lot No., Due Date: J6L020191; 01/22/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6345304; RUNAT UNat by KPA

SDG, Matrix: W05073; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JK72M1AD UNSC<>UNSF Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used No Count Analysis Size found in Batch Data!			✓
8.07 The Correct Count Geometry was Used. No Count Geometry found in Batch Data!			✓
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. No Count Duration Field Found in Batch Data!			✓
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JKPLR1AC Uranium 5.4E+00 L:8.2E-02 JKPLT1AF Uranium 1.7E+01 L:8.3E-02		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => Uranium OK; No Callin Level Found => Uranium	✓		
8.24 Result + 3s >=0, Not Too Negative. Result + 3s < 0 JK72M1AA Uranium -7.0E-03		✓	
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Pam Anderson Date 1-18-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6345304
W05073

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl A Wilson Date: 1-18-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/22/2007 9:25:48 AM

Lot No., Due Date:	J6L080160,J6L060355; 01/22/2007
Client, Site:	384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test:	6345295;
SDG, Matrix:	W05073; WATER

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓ Yes	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓ Yes	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	✓ Yes	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓ Yes	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓ Yes	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	✓ Yes	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	✓ N/A
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓ Yes	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	✓ Yes	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓ Yes	No	N/A
4.2 Were analysis volumes entered correctly?	Yes	No	✓ N/A
4.3 Were Yields entered correctly?	Yes	No	✓ N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes	No	✓ N/A
4.5 Were raw counts reviewed for anomalies?	✓ Yes	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	✓ N/A
5.2 Are all required forms filled out?	✓ Yes	No	N/A
5.3 Was the correct methodology used?	✓ Yes	No	N/A
5.4 Was transcription checked?	✓ Yes	No	N/A
5.5 Were all calculations checked at a minimum frequency?	✓ Yes	No	N/A
5.6 Are worksheet entries complete and correct?	✓ Yes	No	N/A

6.0 Comments on any No response:

First Level Review Pam Anderson Date 1-22-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/22/2007 12:00:31 PM

Lot No., Due Date:	J6L080160; 01/22/2007
Client, Site:	384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test:	7022272;
SDG, Matrix:	W05073; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?			✓
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?			✓
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Pam Anderson Date 1-22-07

PNNL J6L020186
W05073
Due 01-15-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-009-61**

Page 1 of 1

Collector Fluor Hanford K. B. HULSE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-009	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2UP1-LOL NOVEMBER 2006	HNF-N-506.1	**Ice Chest No.** Ross **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L204		W	12-1-06	1137	1x20-mL P	Activity Scan	None
B1L204		W	↓	1137	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JKPK3	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Fluor Hanford K. B. HULSE	K B Hulse	DEC 01 2006 1503	S. Smith	S. Smith		DEC 01 2006 1503
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

PNNL JGL 020186
W05073
Due 01.15.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-009-2

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-009	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2UP1-LOL NOVEMBER 2006	HNF-N-5063	**Ice Chest No.** SMC-24 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L1T6		W	12-1-06	1055	1x20-mL P	Activity Scan	None
B1L1T6		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JKPRO	

Relinquished By Fluor Hanford F. M. HALL Print / Sign	Date/Time DEC 0 1 2006 1505	Received By J. Smith Print / S. Smith Sign	Date/Time DEC 0 1 2006 1505
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

RELEASED
08

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12·1·06 1503

Client: PGW SDG #: W05073 NA [ ] SAF #: I07-009 NA [ ]

Work Order Number: V61020186 Chain of Custody # I07-009 & 61

Shipping Container ID: ROSS, SML-26 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ___7___appropriate samples labels
9. Samples are:
   ___✓___in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: L. Smith Date: 12·1·06 15:03

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

STL RICHLAND

PNNL JGL 020189
W05073
Due 01.15.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-002-166**

Page 1 of 1

Collector Fluor Hanford K. J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100KR4IAM(1/2)-LOI, OCTOBER 2006	HNF-N-506-4	**Ice Chest No.** SHWS-115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KLX1		W	12-1-06	1127	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1KLX1		W	↓	↓	1x20-mL P	Activity Scan	None
B1KLX1		W	↓	↓	3x1000-mL G/P	GAMMA_GS: List-1 (10)	HNO3 to pH <2
B1KLX1		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1KLX1		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JKPLL	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. J. YOUNG	Ken Young	DEC 01 2006	1503	S. Smith	S. Smith	DEC 01 2006	1503
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12-01-06 15:03

Client: POW SDG #: W05073 NA [ ] SAF #: I07-002 NA [ ]

Work Order Number: JGL020189 Chain of Custody # I07-002-166

Shipping Container ID: SAW5-115 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: L. Smith Date: 12-01-06 15:03

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL J6L020191
W05023
due 01.15.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-010-229

Page 1 of 1

Collector Fluor Hanford K. J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, OCTOBER 2006	HNF-N-506.4	**Ice Chest No.** SNWS-115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KR25		W	12.1.06	0959	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1KR25		W			1x20-mL P	Activity Scan	None
B1KR25		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1KR25		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1KR25		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1KR25		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JKPLT	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Fluor Hanford K. J. YOUNG	K. J. YOUNG	DEC 01 2006 1503	A. Smith	S. Smith	DEC 01 2006 1503
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

STL RICHLAND

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PNNL JGL 020191
W05023
Due 01.15.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-010-111**

Page 1 of 1

Collector Fluor Hanford K. J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, OCTOBER 2006	HNF-N 506-4	**Ice Chest No.** SAWS115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KPW0		W	12-1-06	1127	1x20-mL P	Activity Scan	None
B1KPW0		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1KPW0		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JKPLR	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. J. YOUNG	K. J. YOUNG	K. J. Young	DEC 01 2006 1503	S. Smith	S. Smith	S. Smith	DEC 01 2006 1503
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

STL RICHLAND

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12-01-06 1503

Client: POW SDG #: W05023 NA [ ] SAF #: 507-010 NA [ ]

Work Order Number: U6L020191 Chain of Custody # 507-010-111, 229

Shipping Container ID: SAWS-115 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [X] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [X] No [ ]
3. Chain of Custody record present? Yes [X] No [ ]
4. Cooler temperature: _____ NA [X] 5. Vermiculite/packing materials is NA [X] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [X] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ___/___appropriate samples labels
9. Samples are:
   ___/___in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [X] pH>2 [X] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [X] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [X]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 12-01-06 15:03

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

STL RICHLAND

PNNL J6L020192
W05073
Due 01-15-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-011-362**

Page 1 of 1

Collector Fluor Hanford K. J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, NOVEMBER 2006	HNF-N-506-4	**Ice Chest No.** SHOS-115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L3R4		W	12-1-06	1022	1x20-mL P	Activity Scan	None
B1L3R4		W	✓	✓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
						JKPL6	

Relinquished By Print: Fluor Hanford K. J. YOUNG Sign:	Date/Time: DEC 0 1 2006 1503	Received By Print: J. Smith Sign: S. Smith	Date/Time: DEC 0 1 2006 1503
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil	SE = Sediment	SO = Solid	SL = Sludge
W = Water	O = Oil	A = Air	DS = Drum Solid
DL = Drum Liqui	T = Tissue	WI = Wine	L = Liquid
V = Vegetation	X = Other		

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12-01-06 1503

Client: PGW SDG #: W05073 NA [ ] SAF #: 507-011 NA [ ]

Work Order Number: J6L020192 Chain of Custody # 507-011-362

Shipping Container ID: SAWS-115 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 12-01-06 15:03

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

STL RICHLAND

PNNL 06L060355
WO 5073
Due 01-19-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-011-538**

Page 1 of 1

Collector ~~Fluor Hanford~~ L. D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, NOVEMBER 2006	HNF-N-506 3	**Ice Chest No.** SMWS 209 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L6D3		W	12-5-06	1112	1x20-mL P	Activity Scan	None
B1L6D3		W	↓	↓	1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool 4C
						JKXVQ	

Relinquished By Print: Fluor Hanford L. D. WALL Sign: L. D. Wall	Date/Time 1435 DEC 0 5 2006	Received By Print: S. Smith Sign: S. Smith	Date/Time 1435 DEC 0 5 2006
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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STL RICHLAND

PNNL J6L060355
W05073
Due 01-19-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-011-522**

Page 1 of 1

Collector Fluor Hanford L. D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, NOVEMBER 2006	HNF-N-506 3	**Ice Chest No.** SAWS-115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L6C3		W	12-5-06	1025	1x20-mL P	Activity Scan	None
B1L6C3		W	↓	↓	1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool 4C
						JKXVM	

Relinquished By Fluor Hanford L. D. WALL Print L. D. Wall Sign	Date/Time 1435 DEC 0 5 2006	Received By Print S. Smith Sign S. Smith	Date/Time 1435 DEC 0 5 2006
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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STL RICHLAND

PNNL UGL060355
W05073
Fluor Hanford Due 01-19-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-011-530**

Page 1 of 1

Collector L. D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, NOVEMBER 2006	HNF-N-5063	**Ice Chest No.** 3AWS 115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L6C8		W	12-5-06	1454	1x20-mL P	Activity Scan	None
B1L6C8		W	↓	↓	1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool 4C
						JKXVK	

Relinquished By Fluor Hanford L. D. WALL Print L. D. Wall Sign	Date/Time 1435 DEC 0 5 2006	Received By A. Smith Print S. Smith Sign	Date/Time 1435 DEC 0 5 2006
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

PNNL J6L060355
W05073
Fluor Hanford Due 01-19-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-011-554**

Page 1 of 1

Collector L. D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, NOVEMBER 2006	HNF-N-506 3	**Ice Chest No.** SAW 5-115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L6F3		W	12-5-06	1316	1x20-mL P	Activity Scan	None
B1L6F3		W	↓	↓	1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool 4C
						JKXVG	

Relinquished By Fluor Hanford L. D. WALL	Print	Sign L. D. Wall	Date/Time 1435 DEC 0 5 2006	Received By	Print	Sign S. Smith	Date/Time 1435 DEC 0 5 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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PNNL W6L060355
W05073
Due 01-19-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-011-562**

Page 1 of 1

Collector Fluor Hanford L. D. WALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W07-011	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, NOVEMBER 2006	HNF-N-5063	Ice Chest No. SAWS 115 Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L6F8		W	12-5-06	1359	1x20-mL P	Activity Scan	None
B1L6F8		W	↓		1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool 4C
						JKXVD	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL	L D Wall		DEC 05 2006 1435	S. Smith	S. Smith		DEC 05 2006 1435
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

STL RICHLAND

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12·5·06 1435

Client: PGW SDG #: W05073 NA [ ] SAF #: W07-011 NA [ ]

Work Order Number: J6L060355 Chain of Custody # W07-011-562, 554, 530, 522, 538

Shipping Container ID: SAWS209 SAWS 115 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature:_____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 5
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ____tape
   - ____custody seals
   - ____hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____broken
   - ____leaking
   - ____have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 12·5·06 1435

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on_____ by_____ Person contacted_____

[ ] No action necessary; process as is.

Project Manager_____ Date_____

LS-023, 9/03, Rev. 5

PNNL 46060370
W05073
due 01-18-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-010-321**

Page 1 of 1

Collector Fluor Hanford L. D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, OCTOBER 2006	4NE-N-506-3	**Ice Chest No.** SAMS-115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KR39		W	12-4-06	1052	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1KR39		W	↓	↓	1x20-mL P	Activity Scan	None
B1KR39		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JKXXH	

Relinquished By Fluor Hanford L. D. WALL	Print	Sign L.D. Wall	Date/Time DEC 04 2006 1455	Received By	Print S. Smith	Sign S. Smith	Date/Time DEC 04 2006 1455
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12·4·06 1455

Client: PGW SDG #: W05073 NA [ ] SAF #: S07-010 NA [ ]

Work Order Number: J61060370 Chain of Custody # S07-010-321

Shipping Container ID: SAWS115 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]

2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]

3. Chain of Custody record present? Yes [✓] No [ ]

4. Cooler temperature:_____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]

6. Number of samples in shipping container: 1

7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]

8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   1 appropriate samples labels

9. Samples are:
   1 in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)

10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ]

11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]

13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 12·4·06 1455

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on_____by_____ Person contacted_____

[ ] No action necessary; process as is.

Project Manager_____ Date_____

LS-023, 9/03, Rev. 5

PNNL UGL060373
W05073
Due 01-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-011-468**

Page 1 of 1

Collector FLUOR HANFORD M.R. WEIL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056	**MSIN**	**FAX**
SAF No. W07-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**		
Project Title RCRA, NOVEMBER 2006	HNF-N-506-4	**Ice Chest No.** SmL562	**Temp.**	
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**		
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**		

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L674 (F)		W	12-4-06	1249	1x20-mL P	Activity Scan	None
B1L674 (F)		W	1	1	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JKXOA	

Relinquished By FLUOR HANFORD M.R. WEIL	Print	Sign	Date/Time 1455 DEC 04 2006	Received By S. Smith	Print	Sign S. Smith	Date/Time 1455 DEC 04 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SHIP RICHLAND

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PNNL J6L060373
W05073
Due 01-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-011-324**

Page 1 of 1

Collector FLUOR HANFORD M.R. WEIL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, NOVEMBER 2006	HNF-N-506-4	**Ice Chest No.** SMC562 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L5V7		W	12-4-06	1032	1x20-mL P	Activity Scan	None
B1L5V7		W	"	"	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1L5V7		W	"	"	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1L5V7		W	"	"	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
						JKXOE	

Relinquished By Print: FLUOR HANFORD M.R. WEIL Sign:	Date/Time: DEC 04 2006 1455	Received By Print: A. Smith Sign: A. Smith	Date/Time: DEC 04 2006 1455
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SHIP RICHLAND

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12·4·06 1455

Client: PGW SDG #: W05073 NA [ ] SAF #: W07-011 NA [ ]

Work Order Number: J6L060373 Chain of Custody # W07-011-324, 468

Shipping Container ID: SmL562 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: K. Smith Date: 12·4·06 1455

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL 06L060376
W05073
Due 01-19-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-011-402**

Page 1 of 1

Collector Fluor Hanford K. J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, NOVEMBER 2006	HNF-N-506 4	**Ice Chest No.** GRP-06-002 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L3J8		W	12-5-06	1146	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1L3J8		W	1	1	1x20-mL P	Activity Scan	None
						JKX06	
					DF		
						12-5-06	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford	K. J. YOUNG	K. J. Young	DEC 05 2006 1435	S. Smith	S. Smith	S. Smith	DEC 05 2006 1435
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

T00

STL RICHLAND

PNNL 06-060376
W05073
due 01-19-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-011-390**

Page 1 of 1

Collector Fluor Hanford K. J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056	**MSIN**	**FAX**
SAF No. S07-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**		
Project Title SURV, NOVEMBER 2006	HNF-N-506 4	**Ice Chest No.** GRP-06-002	**Temp.**	
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**		
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**		

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L429		W	12-5-06	1045	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1L429		W	〃	〃	1x20-mL P	Activity Scan	None

JKX07

12-5-06

Relinquished By Fluor Hanford K. J. YOUNG Print / Sign	Date/Time DEC 05 2006 1435	Received By S Smith Print / Sign	Date/Time DEC 05 2006 1435
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12-5-06 1435

Client: PGW SDG #: W05073 NA [ ] SAF #: 307-011 NA [ ]

Work Order Number: 06L060376 Chain of Custody # 307-011-402,39

Shipping Container ID: GRP-06-002 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   2 appropriate samples labels
9. Samples are:
   2 in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: L. Smith Date: 12-5-06 1435

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL J62080130
W05073
Due 01.19.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-007-29**

Page 1 of 1

Collector Fluor Hanford K. J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-007	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100KR4IAM(1/2)-LOL NOVEMBER 2006	HNF-N-506 4	**Ice Chest No.** GRP-06-002 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	rity: 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARD:
** **

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L1P0		W	12-5-06	0948	1x20-mL P	Activity Scan	None
B1L1P0		W	1	1	3x1000-mL G/P	GAMMA_GS: List-1 (10)	HNO3 to pH <2

JK3QJ

12-5-06

Relinquished By Fluor Hanford K. J. YOUNG	Print	Sign	Date/Time DEC 05 2006 1435	Received By L. Smith	Print	Sign S. Smith	Date/Time DEC 05 2006 1435
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12.5.06 1435

Client: PGW SDG #: W05073 NA [ ] SAF #: I07-007 NA [ ]

Work Order Number: U6L080130 Chain of Custody # I07-007-29

Shipping Container ID: GRP-06-002 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature:_____ NA [ ] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   ____tape
   ____custody seals
   ____hazard labels
   1 appropriate samples labels
9. Samples are:
   1 in good condition
   ____broken
   ____leaking
   ____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 12.5.06 1435

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on_____ by_____ Person contacted_____

[ ] No action necessary; process as is.

Project Manager_____ Date_____

LS-023, 9/03, Rev. 5

STL RICHLAND

PNNL J6L080158
W05073
Due 01.19.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-010-283**

Page 1 of 1

Collector Fluor Hanford L. D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, OCTOBER 2006	HNF-N-5063	**Ice Chest No.** 3MWS-115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KPP6		W	12-6-06	0948	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1KPP6		W	↓	↓	1x20-mL P	Activity Scan	None
						JK30K	

Relinquished By Fluor Hanford L. D. WALL	Print	Sign L. D. Wall	Date/Time DEC 0 6 2006 1430	Received By	Print	Sign S. Smith	Date/Time DEC 0 6 2006 1450
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12·06·06 14:08

Client: POW SDG #: W05073 NA [ ] SAF #: 507-010 NA [ ]

Work Order Number: JL1080158 SAWS-115 Chain of Custody # 507-010-283

Shipping Container ID: ~~507-010~~ SKS 12/10/06 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 12·6·06 14:08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL, J6L080160
W05073
Due 01-19-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-011-568**

Page 1 of 1

Collector Fluor Hanford L. D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, NOVEMBER 2006	HNF-N-506 3	**Ice Chest No.** SHWS 115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L6H2		W	12-6-06	13/4	1x20-mL P	Activity Scan	None
B1L6H2		W	↓	↓	1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool 4C
						JK317	

Relinquished By Fluor Hanford L. D. WALL Print L. D. Wall Sign	Date/Time 1400 DEC 0 6 2006	Received By S. Smith Print S. Smith Sign	Date/Time 1405 DEC 0 6 2006
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

STL RICHLAND

107

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12-6-06 1408

Client: PNW SDG #: W050073 NA [ ] SAF #: W07-011 NA [ ]

Work Order Number: J6L080168O SRS 12/10/06 Chain of Custody # W07-011-568

Shipping Container ID: SAWS 115 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 12-6-06 1408

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

STL RICHLAND

PNNL 06L080235
W05073
Due 01/19/07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-010-34

Page 1 of 1

Collector Fluor Hanford D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOL NOVEMBER 2006	HNF-N-506 3	**Ice Chest No.** SAMPLES 115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1L274		W	12-6-06	1142	1x20-mL P	Activity Scan	None
B1L274		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1L274		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JK4W7	

Relinquished By	Print: Fluor Hanford D. WALL	Sign: D.O. Wall	Date/Time: DEC 06 2006	Received By	Print: A. Smith	Sign: S. Smith	Date/Time: DEC 06 2006 1420
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil		DS	=	Drum Solid
SE	= Sediment		DL	=	Drum Liqui
SO	= Solid		T	=	Tissue
SL	= Sludge		WI	=	Wine
W	= Water		L	=	Liquid
O	= Oil		V	=	Vegetation
A	= Air		X	=	Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12.06.06 1408

I07-010

Client: PGW SDG #: W05073 NA [ ] SAF #: ~~I07-010-34~~ NA SCS 12/7/06

Work Order Number: JGL080235 Chain of Custody # I07-010-34

Shipping Container ID: SAWS 115 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ___✓___appropriate samples labels
9. Samples are:
   ___✓___in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: L. Smith Date: 12.6.06 1408

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

STL RICHLAND

1/9/2007 1:39:25 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: 235

AnalyDueDate: 01/15/2007 W05073

Batch: 6345306 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ IAPA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JKPLL-1-AC J6L020189-1-SAMP 12/01/2006 11:27	202.10g,in AmtRec: 20ML,8XLP #Containers: 9			1.5	39.8	.50	10B	1628	1/12/07DP Scr: Alpha: 1.32E-03 uCi/Sa	Beta: -2.66E-04 uCi/Sa
2 JKPL6-1-AA J6L020192-1-SAMP 12/01/2006 10:22	199.30g,in AmtRec: 20ML,LP #Containers: 2				23.2	.50	10C		Scr: Alpha: -6.02E-05 uCi/Sa	Beta: 1.39E-05 uCi/Sa
3 JKX0E-1-AC J6L060373-2-SAMP 12/04/2006 10:32	90.00g,in AmtRec: 20ML,500MLP,2XLP #Containers: 4				46.7	100	10A	1828	Scr: Alpha: 1.67E-04 uCi/Sa	Beta: 8.12E-05 uCi/Sa
4 JKX0E-1-AG-X J6L060373-2-DUP 12/04/2006 10:32	93.20g,in AmtRec: 20ML,500MLP,2XLP #Containers: 4				49.9	100	10D		Scr: Alpha: 1.67E-04 uCi/Sa	Beta: 8.12E-05 uCi/Sa
5 JK72Q-1-AA-B J6L110000-306-BLK 12/04/2006 10:32	199.80g,in AmtRec: #Containers: 1				0.2	100	10C		Scr: Alpha:	Beta:
6 JK72Q-1-AC-C J6L110000-306-LCS 12/04/2006 10:32	201.80g,in AmtRec: #Containers: 1	ASD4085 12/18/06,pd 02/09/06,r			0.6	100	10D		Scr: Alpha:	Beta:

STL Richland
Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 6
Prep_SamplePrep v4.8.26

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Sample Preparation/Analysis

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: _____

AnalyDueDate: 01/15/2007

Batch: 6345306
SEQ Batch, Test: None

pCi/L

Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: pH < 2.0 YB 1-9-07

1% colloidin added to ec. samp. 1/12/07 APA

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JKPLL1AC-SAMP Constituent List:
ALPHA RDL:3 pCi/L LCL: UCL: RPD:
JK72Q1AA-BLK:
ALPHA RDL:3 pCi/L LCL: UCL: RPD:
JK72Q1AC-LCS:
Am-241 RDL: pCi/L LCL:70 UCL:130 RPD:20

JKPLL1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK72Q1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK72Q1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND
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1/9/2007 1:35:02 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: 235

AnalyDueDate: 01/15/2007 W005073

Batch: 6345308 **WATER** **pCi/L**
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ /APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 **JKPLL-1-AD** J6L020189-1-SAMP 12/01/2006 11:27	198.30g,in AmtRec: 20ML,8XLP #Containers: 9			1.5	87.7	100	26B	1608	1/12/07 DD	Scr: Alpha: 1.32E-03 uCi/Sa Beta: -2.66E-04 uCi/Sa
2 **JKPL6-1-AC** J6L020192-1-SAMP 12/01/2006 10:22	201.10g,in AmtRec: 20ML,LP #Containers: 2				48.8		26C			Scr: Alpha: -6.02E-05 uCi/Sa Beta: 1.39E-05 uCi/Sa
3 **JKPL6-1-AD-X** J6L020192-1-DUP 12/01/2006 10:22	202.80g,in AmtRec: 20ML,LP #Containers: 2				49.9		26D			Scr: Alpha: -6.02E-05 uCi/Sa Beta: 1.39E-05 uCi/Sa
4 **JKX0E-1-AD** J6L060373-2-SAMP 12/04/2006 10:32	148.10g,in AmtRec: 20ML,500MLP,2XLP #Containers: 4				101.1		27A			Scr: Alpha: -1.67E-04 uCi/Sa Beta: 8.12E-05 uCi/Sa
5 **JK72R-1-AA-B** J6L110000-308-BLK 12/01/2006 10:22	204.60g,in AmtRec: #Containers: 1				0.1		27B			Scr: Alpha: Beta:
6 **JK72R-1-AC-C** J6L110000-308-LCS 12/01/2006 10:22	202.20g,in AmtRec: #Containers: 1	BESB2981 12/21/06,pd 08/08/06,r			0.7		27C			Scr: Alpha: Beta:

1/9/2007 1:35:07 PM

Sample Preparation/Analysis

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 01/15/2007

Sep1 DT/Tm Tech:

Batch: 6345308 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: PH <2.0 JB 1-9-07

10% collodion added to ea. samp. 1/12/07 APA

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JKPLL1AD-SAMP Constituent List:
BETA RDL:4 pCi/L LCL: UCL: RPD:
JK72R1AA-BLK:
BETA RDL:4 pCi/L LCL: UCL: RPD:
JK72R1AC-LCS:
Sr-90 RDL: pCi/L LCL:70 UCL:130 RPD:20

JKPLL1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK72R1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK72R1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND

STL RICHLAND

1/3/2007 3:12:22 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by Nai and Sr-90 by GPC 7 day ingrowth
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: DRM

AnalyDueDate: 01/15/2007 WO5073

Batch: 6345294 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep1 DT/Tm Tech: 1/8/07 3:16 PM
Sep2 DT/Tm Tech: 1/15/07 8:51 AM DRM
Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JKPLL-1-AF J6L020189-1-SAMP		1008.00g,in	SRTB14353 12/21/06,pd 09/11/06,r	1.681 2.0409 0.8887	1.0	23.1	100	9" 4C 3D	2011 0851 0734	1/8/07 DP 1/16/07 1/17/07	
			YTA16814 Ex:7/23/2007								
12/01/2006 11:27		AmtRec: 20ML,8XLP		#Containers: 9				Scr:	Alpha: 1.32E-03 uCi/Sa		Beta: -2.66E-04 uCi/Sa
2 JKPLL-1-AG-X J6L020189-1-DUP		1000.60g,in	SRTB14354 12/21/06,pd 09/11/06,r	1.983 2.0216 0.8820		23.8		3" 4D 4A	2011 0851 0738	1/8/07 DP 1/16/07 1/17/07	
			YTA16815 Ex:7/23/2007								
12/01/2006 11:27		AmtRec: 20ML,8XLP		#Containers: 9				Scr:	Alpha: 1.32E-03 uCi/Sa		Beta: -2.66E-04 uCi/Sa
3 JK4W7-1-AC J6L080235-1-SAMP		1005.80g,in	SRTB14355 12/21/06,pd 09/11/06,r	1.916 2.0443 0.8882		24.1		T' 1A 4B	0529 0738 0738	1/9/07 1/16/07 1/17/07	
			YTA16816 Ex:7/23/2007								
12/06/2006 11:42		AmtRec: 20ML,3XLP,2X4LP		#Containers: 6				Scr:	Alpha: -3.14E-04 uCi/Sa		Beta: 2.58E-03 uCi/Sa
4 JK71X-1-AA-B J6L110000-294-BLK		1002.00g,in	SRTB14356 12/21/06,pd 09/11/06,r	1.692 2.0280 0.8843		24.0		3" 1B 4C	0529 1034 0734	1/7/07 1/16/07 1/17/07	
			YTA16817 Ex:7/23/2007								
12/01/2006 11:27		AmtRec:		#Containers: 1				Scr:	Alpha:		Beta:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 4
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.26

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STL RICHLAND

1/3/2007 3:12:23 PM

Sample Preparation/Analysis

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

AnalyDueDate: 01/15/2007

Batch: 6345294 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 JK71X-1-AC-C		1002.90g,in	SRSG1297	1.486			100				
J6L110000-294-LCS			12/20/06,pd	2.0455		24.0		9"	0600	1/9/07	
			09/11/06,r	0.4265				1C	1038	1/16/07	
			YTA16818					9D	0738	1/17/07	
			Ex:7/23/2007								

12/01/2006 11:27 AmtRec: #Containers: 1 Scr: Alpha: Beta:

Comments: PH <2.0 93 1-3-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JKPLL1AF-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JK71X1AA-BLK:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:

JK71X1AC-LCS:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JKPLL1AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK71X1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK71X1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND

1/8/2007 9:34:40 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory , Pacific Northwest National Lab

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 01/15/2007 W05073

Batch: 6345299 WATER pCi/L

SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ /APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JKPLT-1-AC J6L020191-2-SAMP 12/01/2006 07:59	1961.50g,in				100 mL	100	G8	2005	1/5/07 DD	
	AmtRec: 20ML,2X500ML,LP,3X4LP	#Containers: 7			Scr:	Alpha: 2.41E-03 uCi/Sa			Beta: 6.88E-04 uCi/Sa	
2 JKPLT-1-AG-X J6L020191-2-DUP 12/01/2006 07:59	1944.10g,in						G7	2151		
	AmtRec: 20ML,2X500ML,LP,3X4LP	#Containers: 7			Scr:	Alpha: 2.41E-03 uCi/Sa			Beta: 6.88E-04 uCi/Sa	
3 JK72C-1-AA-B J6L110000-299-BLK 12/01/2006 07:59	2000.30g,in						G4	2006		
	AmtRec:	#Containers: 1			Scr:	Alpha:			Beta:	
4 JK72C-1-AC-C J6L110000-299-LCS 12/01/2006 07:59	2000.60g,in		qcag1317 12/20/06,pd 03/07/05,r			di	G7			
	AmtRec:	#Containers: 1			Scr:	Alpha:			Beta:	

Comments: PH 12-0 JB 1-8-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JKPLT1AC-SAMP Constituent List:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

JK72C1AA-BLK:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

1/8/2007 9:34:42 AM

Sample Preparation/Analysis

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 01/15/2007

Sep1 DT/Tm Tech:

Batch: 6345299 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

```
Cs-137      RDL:6.00E+00  pCi/L  LCL:  UCL:  RPD:  Cs-137DA  RDL:6.00E+00  pCi/L  LCL:  UCL:  RPD:
Eu-154      RDL:0.00E+00  pCi/L  LCL:  UCL:  RPD:  Eu-155    RDL:.00E+00   pCi/L  LCL:  UCL:  RPD:
K-40        RDL:0.00E+00  pCi/L  LCL:  UCL:  RPD:  Sb-125    RDL:0.00E+00  pCi/L  LCL:  UCL:  RPD:

JK72C1AC-LCS:
Cs-137      RDL:15        pCi/L  LCL:70  UCL:130  RPD:20  Cs-137DA  RDL:15  pCi/L  LCL:70  UCL:130  RPD:20
K-40        RDL:6         pCi/L  LCL:70  UCL:130  RPD:20  Ra-226    RDL:--  pCi/L  LCL:70  UCL:130  RPD:20
RA-228      RDL:--        pCi/L  LCL:70  UCL:130  RPD:20  RA-228DA  RDL:--  pCi/L  LCL:70  UCL:130  RPD:20
U-238       RDL:--        pCi/L  LCL:70  UCL:130  RPD:20

JKPLT1AC-SAMP Calc Info:
    Uncert Level (#s).: 2   Decay to SaDt: Y   Blk Subt.: N   Sci.Not.: Y   ODRs: B
JK72C1AA-BLK:
    Uncert Level (#s).: 2   Decay to SaDt: Y   Blk Subt.: N   Sci.Not.: Y   ODRs: B
JK72C1AC-LCS:
    Uncert Level (#s).: 2   Decay to SaDt: Y   Blk Subt.: N   Sci.Not.: Y   ODRs: B
```

Approved By _____ Date: _____

STL RICHLAND

1/8/2007 2:53:48 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 01/15/2007 W05073

Batch: 6345301 WATER pCi/L

SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ / APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JKPLL-1-AE J6L020189-1-SAMP 12/01/2006 11:27	2500.90g,in AmtRec: 20ML,8XLP	#Containers: 9			100mL	100	G4	2152	1/5/07 DD Scr: Alpha: 1.32E-03 uCi/Sa	Beta: -2.66E-04 uCi/Sa
2 JK3QJ-1-AA J6L080130-1-SAMP 12/05/2006 09:48	2502.10g,in AmtRec: 20ML,3XLP	#Containers: 4					G6	2007	Scr: Alpha: -8.29E-05 uCi/Sa	Beta: 1.33E-04 uCi/Sa
3 JK3QJ-1-AC-X J6L080130-1-DUP 12/05/2006 09:48	AmtRec: 20ML,3XLP	#Containers: 4			—		G8	2153	Scr: Alpha: -8.29E-05 uCi/Sa	Beta: 1.33E-04 uCi/Sa
4 JK72H-1-AA-B J6L110000-301-BLK 12/05/2006 09:48	2501.00g,in AmtRec:	#Containers: 1			100mL		G4	2153	Scr: Alpha:	Beta:
5 JK72H-1-AC-C J6L110000-301-LCS 12/05/2006 09:48	2500.40g,in AmtRec:	#Containers: 1	QCAG1319 12/20/06,pd 03/07/05,r				G8	2336	Scr: Alpha:	Beta:

Comments: JK3QJ-SAMP "Comments. DUP. not poured due to no more sample. Please recount on diff. detector. JB 01/08/07"

PH < 2.0 SB 1-8-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JKPLL1AE-SAMP Constituent List:

STL RICHLAND

1/15/2007 2:06:08 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Balance Id:2113224201

Pipet #: _____

AnalyDueDate: 01/15/2007

Sep1 DT/Tm Tech:

Batch: 6345293 **WATER** **pCi/L**
SEQ Batch, Test: None All Tests: 6345293 BNTB,

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech: ,BostedD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JKPK0-1-AA J6L020186-1-SAMP	3934.30g,in	ITA5904 12/28/06			37.0	100	L2	1906	1/17/07 DR	
12/01/2006 10:55	AmtRec: 20ML,2X4LP	#Containers: 3					Scr:	Alpha: 3.37E-04 uCi/Sa		Beta: 1.24E-03 uCi/Sa
2 JKPK3-1-AA J6L020186-2-SAMP	3905.60g,in	ITA5905 12/28/06			37.4		L4	1907		
12/01/2006 11:37	AmtRec: 20ML,2X4LP	#Containers: 3					Scr:	Alpha: 2.32E-04 uCi/Sa		Beta: 1.63E-03 uCi/Sa
3 JKPLT-1-AD J6L020191-2-SAMP	3886.40g,in	ITA5906 12/28/06			37.4		L5			
12/01/2006 07:59	AmtRec: 20ML,2X500ML,LP,3X4LP	#Containers: 7					Scr:	Alpha: 2.41E-03 uCi/Sa		Beta: 6.88E-04 uCi/Sa
4 JKXXH-1-AC J6L060370-1-SAMP	3945.80g,in	ITA5907 12/28/06			37.4		L2	2051		
12/04/2006 10:52	AmtRec: 20ML,LP,2X4LP	#Containers: 4					Scr:	Alpha: -1.03E-03 uCi/Sa		Beta: 1.99E-03 uCi/Sa
5 JK4W7-1-AA J6L080235-1-SAMP	3924.50g,in	ITA5908 12/28/06			~~37.4~~ 40.3	1-17-07	L4	2053		
12/06/2006 11:42	AmtRec: 20ML,3XLP,2X4LP	#Containers: 6					Scr:	Alpha: -3.14E-04 uCi/Sa		Beta: 2.58E-03 uCi/Sa
6 JK4W7-1-AD-X J6L080235-1-DUP	3741.50g,in	ITA5909 12/28/06			36.7		L5			
12/06/2006 11:42	AmtRec: 20ML,3XLP,2X4LP	#Containers: 6					Scr:	Alpha: -3.14E-04 uCi/Sa		Beta: 2.58E-03 uCi/Sa
7 JK71W-1-AA-B J6L110000-293-BLK	3568.00g,in	ITA5910 12/28/06			37.2		L4	2240		
12/06/2006 11:42	AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:

20

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1/15/2007 2:06:11 PM

Sample Preparation/Analysis

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Balance Id:2113224201

Pipet #: _____

AnalyDueDate: 01/15/2007

Sep1 DT/Tm Tech:

Batch: 6345293
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech: ,BostedD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JK71W-1-AC-C J6L110000-293-LCS 12/06/2006 11:42		3738.10g,in	ISD0718 12/14/06,pd 11/17/04,r		40.8	100	L5	2241	1/17/07 DL	

AmtRec: #Containers: 1 Scr: Alpha: Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JKPK01AA-SAMP Constituent List:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
JK71W1AA-BLK:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
JK71W1AC-LCS:
I-129 RDL:5 pCi/L LCL:70 UCL:130 RPD:20

JKPK01AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK71W1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK71W1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND

1/8/2007 8:50:47 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #:

AnalyDueDate: 01/15/2007 WO5073

Sep1 DT/Tm Tech:

Batch: 6345303 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JKPLR-1-AA J6L020191-1-SAMP 12/01/2006 11:27			125.30g,in	125.30g		60				
			AmtRec: 20ML,2X500MLP	#Containers: 3				Scr:	Alpha: -3.66E-05 uCi/Sa	Beta: 1.39E-05 uCi/Sa
2 JKPLT-1-AE J6L020191-2-SAMP 12/01/2006 07:59			125.10g,in	125.10g						
			AmtRec: 20ML,2X500ML,LP,3X4LP	#Containers: 7				Scr:	Alpha: 2.41E-03 uCi/Sa	Beta: 6.88E-04 uCi/Sa
3 JKX0A-1-AA J6L060373-1-SAMP 12/04/2006 12:47			125.40g,in	125.40g						
			AmtRec: 20ML,500MLP	#Containers: 2				Scr:	Alpha: -6.93E-05 uCi/Sa	Beta: 1.28E-04 uCi/Sa
4 JKX0A-1-AC-X J6L060373-1-DUP 12/04/2006 12:47			125.90g,in	125.90g						
			AmtRec: 20ML,500MLP	#Containers: 2				Scr:	Alpha: -6.93E-05 uCi/Sa	Beta: 1.28E-04 uCi/Sa
5 JKX0E-1-AE J6L060373-2-SAMP 12/04/2006 10:32			125.20g,in	125.20g						
			AmtRec: 20ML,500MLP,2XLP	#Containers: 4				Scr:	Alpha: -1.67E-04 uCi/Sa	Beta: 8.12E-05 uCi/Sa
6 JKX0E-1-AF-S J6L060373-2-MS 12/04/2006 10:32			125.80g,in	125.80g	tcsg1736 12/06/06,pd 01/10/06,r					
			AmtRec: 20ML,500MLP,2XLP	#Containers: 4				Scr:	Alpha: -1.67E-04 uCi/Sa	Beta: 8.12E-05 uCi/Sa
7 JK72J-1-AA-B J6L110000-303-BLK 12/04/2006 12:47			125.00g,in	125.00g						
			AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

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1/8/2007 8:50:48 AM

Sample Preparation/Analysis

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 01/15/2007

Sep1 DT/Tm Tech:

Batch: 6345303 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JK72J-1-AC-C J6L110000-303-LCS 12/04/2006 12:47			125.60g,in	125.60g	tcse2045 12/20/06,pd 01/10/06,r	60				
			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:
9 JK72J-1-AD-BN J6L110000-303-IBLK 12/04/2006 12:47										
			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:

Comments: PH <2.0 JS 1-8-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JKPLR1AA-SAMP Constituent List:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JKX0E1AF-MS:

JK72J1AA-BLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
JK72J1AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JK72J1AD-IBLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JKPLR1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JKX0E1AF-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK72J1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK72J1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK72J1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

STL RICHLAND

12/11/2006 11:13:36 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12445
Pipet #:

AnalyDueDate: 01/15/2007 WD5073

Sep1 DT/Tm Tech: 12-28-06 [illegible]

Batch: 6345297 **WATER** **pCi/L**
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JKPLL-1-AA J6L020189-1-SAMP 12/01/2006 11:27	AmtRec: 20ML,8XLP	#Containers: 9		Scr:	Alpha:		Beta:	
2 JKPLT-1-AA J6L020191-2-SAMP 12/01/2006 07:59	AmtRec: 20ML,2X500ML,LP,3X4LP	#Containers: 7		Scr:	Alpha:		Beta:	
3 JKXXH-1-AA J6L060370-1-SAMP 12/04/2006 10:52	AmtRec: 20ML,LP,2X4LP	#Containers: 4		Scr:	Alpha:		Beta:	
4 JKX0E-1-AA J6L060373-2-SAMP 12/04/2006 10:32	AmtRec: 20ML,500MLP,2XLP	#Containers: 4		Scr:	Alpha:		Beta:	
5 JKX06-1-AA J6L060376-1-SAMP 12/05/2006 11:46	AmtRec: 20ML,LP	#Containers: 2		Scr:	Alpha:		Beta:	
6 JKX06-1-AC-X J6L060376-1-DUP 12/05/2006 11:46	AmtRec: 20ML,LP	#Containers: 2		Scr:	Alpha:		Beta:	
7 JKX07-1-AA J6L060376-2-SAMP 12/05/2006 10:48	AmtRec: 20ML,LP	#Containers: 2		Scr:	Alpha:		Beta:	

STL RICHLAND

12/11/2006 11:13:36 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id:

Pipet #:

AnalyDueDate: 01/15/2007

Sep1 DT/Tm Tech:

Batch: 6345297 WATER pCi/L PM, Quote: SA , 57671

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JK30K-1-AA J6L080158-1-SAMP 12/06/2006 09:48		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha:	Beta:
9 JK716-1-AA-B J6L110000-297-BLK 12/05/2006 11:46		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 JK716-1-AC-C J6L110000-297-LCS 12/05/2006 11:46		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
11 JK716-1-AD-BX J6L110000-297-MBLK 12/05/2006 11:46		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
12 JK716-1-AE-CM J6L110000-297-MLCS 12/05/2006 11:46		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
13 JK716-1-AF-BN J6L110000-297-IBLK 12/05/2006 11:46		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
14 JK716-1-AG-BN J6L110000-297-IBLK 12/05/2006 11:46		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

12/11/2006 11:13:38 AM

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 01/15/2007

Batch: 6345297 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JK716-1-AH-BN J6L110000-297-IBLK 12/05/2006 11:46	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JKPLL1AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JK7161AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JK7161AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JK7161AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JK7161AE-MLCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JK7161AF-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JK7161AG-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JK7161AH-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

JKPLL1AA-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JK7161AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JK7161AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JK7161AD-MBLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JK7161AE-MLCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

STL RICHLAND

1/5/2007 12:14:52 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 01/15/2007 W05073

Sep1 DT/Tm Tech:

Batch: 6345304 WATER ug/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JKPLR-1-AC J6L020191-1-SAMP 12/01/2006 11:27	25.70g,in	AmtRec: 20ML,2X500MLP	#Containers: 3			Scr:	Alpha: -3.66E-05 uCi/Sa	Beta: 1.39E-05 uCi/Sa
2 JKPLR-1-AD-X J6L020191-1-DUP 12/01/2006 11:27	26.10g,in	AmtRec: 20ML,2X500MLP	#Containers: 3			Scr:	Alpha: -3.66E-05 uCi/Sa	Beta: 1.39E-05 uCi/Sa
3 JKPLT-1-AF J6L020191-2-SAMP 12/01/2006 07:59	25.40g,in	AmtRec: 20ML,2X500ML,LP,3X4LP	#Containers: 7			Scr:	Alpha: 2.41E-03 uCi/Sa	Beta: 6.88E-04 uCi/Sa
4 JKPLT-1-AH-S J6L020191-2-MS 12/01/2006 07:59	25.90g,in	AmtRec: 20ML,2X500ML,LP,3X4LP	UNSF3522 12/18/06,pd 03/22/05,r #Containers: 7			Scr:	Alpha: 2.41E-03 uCi/Sa	Beta: 6.88E-04 uCi/Sa
5 JK72M-1-AA-B J6L110000-304-BLK 12/01/2006 11:27	25.50g,in	AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 JK72M-1-AC-C J6L110000-304-LCS 12/01/2006 11:27	25.70g,in	AmtRec:	UNSF3523 12/18/06,pd 03/22/05,r #Containers: 1			Scr:	Alpha:	Beta:
7 JK72M-1-AD-C J6L110000-304-LCS 12/01/2006 11:27	25.40g,in	AmtRec:	UNSC1453 12/18/06,pd 04/28/06,r #Containers: 1			Scr:	Alpha:	Beta:

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1/5/2007 12:14:54 PM

Sample Preparation/Analysis

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 01/15/2007

Sep1 DT/Tm Tech:

Batch: 6345304 ug/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: PH < 2.0 93 1-5-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JKPLR1AC-SAMP Constituent List:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
JKPLT1AH-MS:

JK72M1AA-BLK:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
JK72M1AC-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20
JK72M1AD-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

JKPLR1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JKPLT1AH-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK72M1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK72M1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK72M1AD-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND

1/22/2007 12:01:17 PM

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 01/19/2007

Batch: 6345295 WATER

SEQ Batch. Test: None

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223
5I CLIENT: HANFORD

PM, Quote: SA , 57671

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JKXVD-1-AA J6L060355-1-SAMP 12/05/2006 13:59		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: 2.52E-05 uCi/Sa	Beta: 3.40E-05 uCi/Sa
2 JKXVG-1-AA J6L060355-2-SAMP 12/05/2006 13:16		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: 5.77E-05 uCi/Sa	Beta: -1.32E-05 uCi/Sa
3 JKXVK-1-AA J6L060355-3-SAMP 12/05/2006 11:54		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: -2.51E-05 uCi/Sa	Beta: 4.39E-06 uCi/Sa
4 JKXVM-1-AA J6L060355-4-SAMP 12/05/2006 10:25		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: 3.38E-05 uCi/Sa	Beta: 4.43E-06 uCi/Sa
5 JKXVQ-1-AA J6L060355-5-SAMP 12/05/2006 11:12		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: 2.20E-05 uCi/Sa	Beta: 4.41E-06 uCi/Sa
6 JKXVQ-1-AC-X J6L060355-5-DUP 12/05/2006 11:12		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: 2.20E-05 uCi/Sa	Beta: 4.41E-06 uCi/Sa
7 JK710-1-AA-B J6L110000-295-BLK 12/05/2006 13:59		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added ICOC v4.8.26

1/22/2007 12:01:19 PM

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223
5I CLIENT: HANFORD

Balance Id:

Pipet #:

AnalyDueDate: 01/19/2007

Sep1 DT/Tm Tech:

Batch: 6345295
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JK710-1-AC-C J6L110000-295-LCS 12/05/2006 13:59	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JKXVD1AA-SAMP Constituent List:

JK7101AA-BLK:

JK7101AC-LCS:

JKXVD1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK7101AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JK7101AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AnalyDueDate: 01/19/2007

Batch: 7022272 WATER
SEQ Batch, Test: None

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223
5I CLIENT: HANFORD

PM, Quote: SA , 57671

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JK317-1-AA J6L080160-1-SAMP 12/06/2006 13:14		AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: 5.10E-05 uCi/Sa	Beta: -5.45E-05 uCi/Sa
2 JK317-1-AC-X J6L080160-1-DUP 12/06/2006 13:14		AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: 5.10E-05 uCi/Sa	Beta: -5.45E-05 uCi/Sa
3 JM6RE-1-AA-B J7A220000-272-BLK 12/06/2006 13:14		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
4 JM6RE-1-AC-C J7A220000-272-LCS 12/06/2006 13:14		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JK3171AA-SAMP Constituent List:

JM6RE1AA-BLK:

JM6RE1AC-LCS:

JK3171AA-SAMP Calc Info:

STL RICHLAND

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223
5I CLIENT: HANFORD

AnalyDueDate: 01/19/2007

Batch: 7022272
SEQ Batch, Test: None

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JM6RE1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JM6RE1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND
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1/16/2007 8:32:31 AM

ICOC Fraction Transfer/Status Report

ByDate: 1/16/2006, 1/21/2007, Batch: '6345306', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting		Comments
6345306						
AC			CalcC	BockJ	1/9/2007 1:35:24 PM	
SC				wagarr	IsBatched 12/11/2006 11:15:16 AM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep 1/9/2007 1:35:24 PM	RICH-RC-5016 Revision 6
SC				BockJ	Prep1C 1/9/2007 1:39:56 PM	RICH-RC-5014 REVISION 6
SC				AshworthA	InPrep2 1/11/2007 11:57:05 AM	RICH-RC-5014 REVISION 6
SC				AshworthA	Prep2C 1/12/2007 1:48:57 PM	RICH-RC-5014 REVISION 6
SC				DAWKINSO	InCnt1 1/12/2007 3:16:55 PM	RICH-RD-0003 REVISION 4
SC				DAWKINSO	CalcC 1/12/2007 8:47:09 PM	RICH-RD-0003 REVISION 4
AC				BockJ	1/9/2007 1:39:56 PM	
AC				AshworthA	1/11/2007 11:57:05	
AC				AshworthA	1/12/2007 1:48:57 PM	
AC				DAWKINSO	1/12/2007 3:16:55 PM	
AC				DAWKINSO	1/12/2007 8:47:09 PM	

AC: Accepting Entry; SC: Status Change

1/16/2007 8:29:17 AM

ICOC Fraction Transfer/Status Report

ByDate: 1/16/2006, 1/21/2007, Batch: '6345308', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6345308						
AC		CalcC	BockJ	1/9/2007 1:29:46 PM		
SC			wagarr	IsBatched	12/11/2006 11:15:16 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	1/9/2007 1:29:46 PM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	1/9/2007 1:35:10 PM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	1/11/2007 11:57:14 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C	1/12/2007 1:48:39 PM	RICH-RC-5014 REVISION 6
SC			DAWKINSO	InCnt1	1/12/2007 1:58:59 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	1/12/2007 5:26:40 PM	RICH-RD-0008 REVISION 4
AC			**BockJ**	1/9/2007 1:35:10 PM		
AC			**AshworthA**	1/11/2007 11:57:14		
AC			**AshworthA**	1/12/2007 1:48:39 PM		
AC			**DAWKINSO**	1/12/2007 1:58:59 PM		
AC			**DAWKINSO**	1/12/2007 5:26:40 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.26

1/17/2007 4:05:35 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/17/2006, 1/22/2007, Batch: '6345294', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6345294						
AC		CalcC	BockJ	1/3/2007 2:59:39 PM		
SC			wagarr	IsBatched	12/11/2006 11:15:16 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	1/3/2007 2:59:39 PM	rich-rc-5017 rEVISION 5
SC			BockJ	Prep1C	1/3/2007 3:18:36 PM	RICH-RC-5016 REVISION 6
SC			ManisD	InSep1	1/3/2007 4:06:23 PM	RICH-RC-5006 REV 6
SC			ManisD	Sep1C	1/8/2007 3:38:07 PM	RICH-RC-5006 REV 6
SC			DAWKINSO	InCnt1	1/8/2007 3:52:56 PM	RICH-RD-0007 REVISION 5
SC			BlackCL	Cnt1C	1/9/2007 7:27:35 AM	RICH-RD-0007 REVISION 5
SC			ManisD	Sep2C	1/15/2007 3:58:51 PM	RICH-RC-5071 REV 4
SC			DAWKINSO	InCnt2	1/15/2007 4:24:04 PM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	1/17/2007 8:19:38 AM	RICH-RD-0003 REVISION 4
AC			BockJ	1/3/2007 3:18:36 PM		
AC			ManisD	1/3/2007 4:06:23 PM		
AC			ManisD	1/8/2007 3:38:07 PM		
AC			DAWKINSO	1/8/2007 3:52:56 PM		
AC			BlackCL	1/9/2007 7:27:35 AM		
AC			ManisD	1/15/2007 3:58:51 PM		
AC			DAWKINSO	1/15/2007 4:24:04 PM		
AC			BlackCL	1/17/2007 8:19:38		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 9

ICOCFractions v4.8.26

1/16/2007 4:43:38 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/16/2006, 1/21/2007, Batch: '6345299', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6345299						
AC		CalcC	BockJ	1/8/2007 9:22:29 AM		
SC			wagarr	IsBatched	12/11/2006 11:15:16 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	1/8/2007 9:22:29 AM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	1/8/2007 9:34:46 AM	RICH-RC-5017 REVISION 5
SC			AshworthA	InPrep2	1/12/2007 9:14:54 AM	RICH-RC-5017 REVISION 4
SC			AshworthA	Prep2C	1/15/2007 5:46:13 PM	RICH-RC-5017 REVISION 4
SC			DAWKINSO	InCnt1	1/15/2007 5:58:17 PM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	CalcC	1/15/2007 9:58:54 PM	RICH-RD-0007 REVISION 5
AC			BockJ	1/8/2007 9:34:46 AM		
AC			AshworthA	1/12/2007 9:14:54		
AC			AshworthA	1/15/2007 5:46:13 PM		
AC			DAWKINSO	1/15/2007 5:58:17 PM		
AC			DAWKINSO	1/15/2007 9:58:54 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.26

1/16/2007 4:44:32 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/16/2006, 1/21/2007, Batch: '6345301', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6345301						
AC		CalcC	BockJ	1/8/2007 2:41:43 PM		
SC			wagarr	IsBatched	12/11/2006 11:15:16 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	1/8/2007 2:41:43 PM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	1/8/2007 2:59:45 PM	RICH-RC-5017 REVISION 5
SC			AshworthA	InPrep2	1/12/2007 9:15:02 AM	RICH-RC-5017 REVISION 4
SC			AshworthA	Prep2C	1/15/2007 5:46:23 PM	RICH-RC-5017 REVISION 4
SC			DAWKINSO	InCnt1	1/15/2007 5:58:23 PM	RICH-RD-0007 REVISION 5
SC			BlackCL	CalcC	1/16/2007 7:03:05 AM	RICH-RD-0007 REVISION 5
AC			BockJ	1/8/2007 2:59:45 PM		
AC			AshworthA	1/12/2007 9:15:02		
AC			AshworthA	1/15/2007 5:46:23 PM		
AC			DAWKINSO	1/15/2007 5:58:23 PM		
AC			BlackCL	1/16/2007 7:03:05		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.26

1/19/2007 11:46:19 AM

ICOC Fraction Transfer/Status Report

ByDate: 1/19/2006, 1/24/2007, Batch: '6345293', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6345293						
AC		CalcC	**BostedD**	1/8/2007 2:03:10 PM		
SC			wagarr	IsBatched	12/11/2006 11:15:16 AM	ICOC_RADCALC v4.8.26
SC			BostedD	InPrep	1/8/2007 2:03:10 PM	RICHRC5025 REV3
SC			BostedD	Prep1C	1/17/2007 4:44:00 PM	RICHRC5025 REV3
SC			DAWKINSO	InCnt1	1/17/2007 4:54:09 PM	RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	1/18/2007 6:42:32 AM	RICH-RD-0007 REVISION 5
AC			**BostedD**	1/17/2007 4:44:00 PM		
AC			**DAWKINSO**	1/17/2007 4:54:09 PM		
AC			**StringerR**	1/18/2007 6:42:32		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.26

1/12/2007 2:40:00 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/12/2006, 1/17/2007, Batch: '6345303', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting		Comments
6345303						
AC			**CalcC**	**BockJ**	1/8/2007 8:39:34 AM	
SC				wagarr	IsBatched 12/11/2006 11:15:16 AM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep 1/8/2007 8:39:34 AM	RICH-RC-5016 Revision 6
SC				BockJ	Prep1C 1/8/2007 8:50:54 AM	RICH-RC-5016 REVISION 6
SC				FABREM	Sep1C 1/10/2007 2:28:48 PM	RICH-RC-5065 REVISION 5
SC				DAWKINSO	InCnt1 1/10/2007 2:57:02 PM	RICH-RD-0001 REVISION 3
SC				StringerR	CalcC 1/11/2007 9:08:38 AM	RICH-RD-0001 REVISION 3
AC				**BockJ**	1/8/2007 8:50:54 AM	
AC				**FABREM**	1/10/2007 2:28:48 PM	
AC				**DAWKINSO**	1/10/2007 2:57:02 PM	
AC				**StringerR**	1/11/2007 9:08:38	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.26

1/9/2007 4:17:03 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/9/2006, 1/14/2007, Batch: '6345297', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
6345297							
AC			**CalcC**	**McDowellD**	12/28/2006 11:12:51		
SC				wagarr	IsBatched	12/11/2006 11:15:16 AM	ICOC_RADCALC v4.8.26
SC				McDowellD	InSep1	12/28/2006 11:12:51 AM	RICH-RC-5007 REVISION 6
SC				McDowellD	Sep1C	1/5/2007 3:32:27 PM	RICH-RC-5007 REVISION 6
SC				DAWKINSO	InCnt1	1/5/2007 3:39:07 PM	RICH-RD-0001 REVISION 3
SC				StringerR	CalcC	1/7/2007 10:07:13 AM	RICH-RD-0001 REVISION 3
AC				**McDowellD**	1/5/2007 3:32:27 PM		
AC				**DAWKINSO**	1/5/2007 3:39:07 PM		
AC				**StringerR**	1/7/2007 10:07:13		

AC: Accepting Entry, SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.26

1/18/2007 11:03:19 AM

ICOC Fraction Transfer/Status Report

ByDate: 1/18/2006, 1/23/2007, Batch: '6345304', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6345304						
AC		Cnt1C	BockJ	1/5/2007 12:08:27 PM		
SC			wagarr	IsBatched	12/11/2006 11:15:16 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	1/5/2007 12:08:27 PM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	1/5/2007 12:15:35 PM	RICH-RC-5015 REVISION 4
SC			AntonsonL	Sep1C	1/12/2007 3:37:28 PM	RICH-RC-5015 REVISION 4
SC			NelsonT	Cnt1C	1/17/2007 5:42:48 PM	RICH-RC-5058 REV 7
AC			BockJ	1/5/2007 12:15:35 PM		
AC			AntonsonL	1/12/2007 3:37:28 PM		
AC			NelsonT	1/17/2007 5:42:48 PM		

AC: Accepting Entry; SC: Status Change

RQC050 Severn Trent Laboratories, Inc. Run Date: 1/22/07
WET CHEM BATCHSHEET Time: 12:47:37

STL Richland

PRODUCTION FIGURES - WET CHEM

TOTAL NUMBER	SAMPLE NUMBER	QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE

METHOD: IZ COLIFORM BY METHOD 9223
QC BATCH #: 6345295
PREP DATE: 12/11/06
COMP DATE: 12/11/06
USER: KENITZEP

INITIALS:
PREP DM by PA 1-22-07
ANAL DM by PA

DATA ENTRY:
INITIALS _____
DATE _____

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID:	#col
JKXVD-1-AA	J-6L060355-001	XX I 88 IZ 5I	E	12-5-06	B1L6F8	0
JKXVG-1-AA	J-6L060355-002	XX I 88 IZ 5I	E		B1L6F3	0
JKXVK-1-AA	J-6L060355-003	XX I 88 IZ 5I	E		B1L6C8	344.8
JKXVM-1-AA	J-6L060355-004	XX I 88 IZ 5I	E		B1L6C3	0
JKXVQ-1-AA	J-6L060355-005	XX I 88 IZ 5I	E		B1L6D3	0
JKXVQ-1-AC	J-6L060355-005-X	XX I 88 IZ 5I	E		B1L6D3 DUP	0
JK710-1-AA	J-6L110000-295-B	XX I 88 IZ 5I			INTRA-LAB BLANK	0
JK710-1-AC	J-6L110000-295-C	XX I 88 IZ 5I			INTRA-LAB CHECK	9.7

Control Limits

(0-0)

RQC050 Severn Trent Laboratories, Inc. Run Date: 1/22/07
WET CHEM BATCHSHEET Time: 12:48:32

STL Richland

PRODUCTION FIGURES - WET CHEM

TOTAL NUMBER	SAMPLE NUMBER	QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE

METHOD: IZ COLIFORM BY METHOD 9223
QC BATCH #: **7022272**
PREP DATE: 1/22/07
COMP DATE: 12/11/06
USER: KENITZEP

INITIALS:
PREP RM by PP 1-22-07
ANAL RM by PP 1.22.07

DATA ENTRY:
INITIALS _____
DATE _____

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID:	# col
JK317-1-AA	J-6L080160-001	XX I 88 IZ 5I	E	12.6.06	B1L6H2	0
JK317-1-AC	J-6L080160-001-X	XX I 88 IZ 5I	E		B1L6H2 DUP	0
JM6RE-1-AA	J-7A220000-272-B	XX I 88 IZ 5I			INTRA-LAB BLANK	0
JM6RE-1-AC	J-7A220000-272-C	XX I 88 IZ 5I		√	INTRA-LAB CHECK	2 L 3

Control Limits

(0-0)